

14

The American Perfumer

and Essential Oil Review

The Independent International Journal devoted to perfumery, soaps, flavoring extracts, etc. No producer, dealer or manufacturer has any financial interest in it, or any voice in its control or policy.

ONE DOLLAR A YEAR.
TEN CENTS A COPY.

NEW YORK, MARCH, 1914.

Vol. IX. No. 1.

THE AMERICAN PERFUMER
and ESSENTIAL OIL REVIEW
PUBLISHED MONTHLY.
PERFUMER PUBLISHING COMPANY
80 Maiden Lane.

LOUIS SPENCER LEVY, President and Treasurer, } 80 Maiden Lane
JOSEPH S. MENLINE, Secretary, } New York.
Entered as Second-class Matter March 22d, 1907, at the Post Office
at New York, N. Y., Under the Act of Congress of March 3d, 1879.

TERMS OF SUBSCRIPTION

The United States and Possessions, - \$ 1.00 A Year
Canada and Mexico, - - - - - 1.50 " "
Foreign, - - - - - 2.00 " "

MANUFACTURING PERFUMERS' ASSOCIATION.—President, W. A. Bradley, 472 West 43d St., New York; Secretary, A. D. Henderson, 31 Park Place, New York.

FLAVORING EXTRACT MFRS. ASSN.—President, S. J. Sherer, 1705 S. Clark St., Chicago, Ill.; Secretary, Frank L. Beggs, Newark, Ohio.

NATIONAL MANUFACTURERS OF SODA WATER FLAVORS.—O. A. Atkins, President, Boston, Mass.; Edward Post, Secretary and Treasurer, 400 N. Fifth street, Philadelphia, Pa.

BARBERS' SUPPLY DEALERS' ASSOCIATION.—President, Charles M. Dickson, Sioux City, Iowa; Secretary, G. G. Thomas, Des Moines, Iowa.

CONTENTS

Copyright, 1914, by Perfumer Publishing Company

EDITORIAL:

	Page
Perfumers' Convention	1
Turning Over a New Leaf	2
No Cause for Worry by Anybody	2
The Sandalwood Victory	2
Paragraph 17 Construed	3
Our Trade Notes Department	3
Resale of Patented Articles	4
National Chamber of Commerce	4
Facts About Oil Tests	4
American Chemical Society	5
Trade Mark Decision	6
Natural and Artificial Civet	7
Utilizing Soap Weed in the West	8
The Soap Making Industry	9
The Preservative Action of Essential Oils	12
Both Sides of Methyl Alcohol Question (Correspondence)	14
Flavoring Extract Section:	
Official Report of Association	16
Drawbacks on Flavoring Extracts and Vanillin	16
Pure Food and Drug Notes	16
Trade Notes	18
New Incorporations	21
Price Lists, Publications, etc., Received	22
Patchouli Oil	22
In Memoriam	23
Patents and Trade Marks	24
Recent Treasury Decisions	27
Foreign Correspondence and Market Report	28
Analytical Tests and Methods for Essential Oils	30

PERFUMERS' CONVENTION.

Announcement has been made of the program for the twentieth annual convention of the Manufacturing Perfumers' Association, on April 1, 2 and 3, along the lines intimated in the brief note in our February issue. The business sessions will be held at the Whitehall Club, 17 Battery Place, New York, and it is expected that there will be several very competent and well-known speakers who will address the convention on matters of importance to perfumery manufacturers.

The Entertainment Committee has prepared an elaborate program, which opens with a theatre party at the Winter Garden, where the "Whirl of the World" is being played, and after the performance the guests will be taken by automobile busses to the Astor Hotel for supper, which will be followed by dancing. Mr. Nahan Franko and his orchestra will furnish the music for the exhibition dancing and for the dancing of the guests.

On Friday night, April 3, a stag banquet will be held at the Biltmore Hotel, followed by a cabaret performance. The speakers at the banquet will be Elbert Hubbard, the sage of East Aurora, N. Y.; the Rev. W. W. Giles, of Philadelphia, who will speak on "Perfume of Good Fellowship," and one or two other speakers of note may send in their acceptances.

The membership committee, headed by Mr. Stanton I. Hanson, has made very good progress during the year, and expects to report a baker's dozen of new active members. Already nine have been obtained, as follows: Melba Manufacturing Company, Chicago; E. W. Hoyt Company, Lowell, Mass.; Imperial Crown Perfumery Company (Meyer Brothers Drug Company, proprietors), St. Louis; Koken Barbers' Supply Company, St. Louis; Darius McLean, Detroit; R. A. Carmichael & Co., Detroit; Armour & Co., Chicago; Kells Company, Newburgh, N. Y.; A. A. Vantine & Co., Inc., New York.

In the Morgan collection at the Metropolitan Museum of Art, which visiting perfumers ought to see during their

stay in the city, a particular attraction is the Fragonard Room, Gallery 19, which includes some of the best works of this famous painter, who spent much of his life in the inspiring surroundings of his native town, Grasse, France. Included in the display are: "The Pursuit," "The Meeting," "Memories," "The Lover Crowned," "The Abandonment," "Love the Victor," "Love the Jester," "Love Chasing a Dove," "Love as a Sentinel" and "Love the Assassin." There also are four panels of flowers which must be seen to be at all appreciated.

TURNING OVER A NEW LEAF.

Most successful trade journals start in Topsy fashion, and THE AMERICAN PERFUMER AND ESSENTIAL OIL REVIEW was no exception to the general source of origin, but the progress it has made in the last eight years puts it far ahead of others of our age. We begin with this issue our ninth year. There is really nothing to say about the birthday, for both readers and advertisers so well appreciate the service we are giving to them that any remarks in that direction would be like carrying flowers to Grasse.

We are turning over a new leaf in the sense that we are entering into a new year of journalistic life, in which we shall strive to raise higher than ever our standards of service to our friends, and it will require serious effort, constant attention and persistent determination to make good our purpose. That it will be done we think no one will doubt, but we invite the co-operation of both advertisers and readers to accomplish the object of making our journal even more useful and beneficial to them than it is at present.

NO CAUSE FOR WORRY BY ANYBODY.

Despite the few remaining carbuncles that are trying to cling to the wheels of progress in American prosperity, conditions continue to improve in all parts of the country and the prompt and enthusiastic response of business men generally to the call for absolute optimism is having the beneficial effect to be expected. In this connection here is something that will interest our readers both at home and abroad. It is the view of Mr. Albert Plaut, a leader in the wholesale drug trade and an expert upon business and commercial affairs generally:

"Every time I have returned from a trip abroad, and this is my fifteenth return, I have felt glad that I am a citizen of the United States, where business, restricted though it be by occasional tariff agitation and revision, is free from the unceasingly restraining influence of political disquietude, such as prevails throughout the Continent."

"Few of us realize how fortunate we are to live in a country far removed from uneasiness on the score of international complications, such as are constantly feared in France, Italy, Germany and Austria. We may think at the moment that the Mexican situation suggests the possibility of such a complication in our intervention there, but we cannot appreciate how unfortunate it is to be always on the anxious seat on the score of a possible development of hostilities on the part of all neighboring countries.

"Business in drug and chemical lines in Europe, though curtailed somewhat by the political unrest of the Continent and consequently increased taxation, is now in about the same position as a year ago, with dividends of the leading companies engaged in these industries still relatively large, despite this limiting of business, because of conservative capitalization and management of these concerns.

"Some of the citizens of this country feel that they are being compelled to shoulder a heavy burden in the income tax now levied upon them, but I wonder how they would feel if they had to meet an income tax of 5 per cent., placed upon the poor and the rich alike, such as that now demanded of its subjects by the German empire, or if they were compelled to give three years of their lives in compulsory military service, as was recently suggested by the French Government."

"Taking it as a whole, the citizen and subject in Europe is being taxed to a far greater extent than the citizen of this country, in order to obtain such protection as that afforded every person in the United States, and is also restricted in his business operations by political unrest, such as we have never known. It is not remarkable, therefore, that I am always glad to return to this country, where we are comparatively free from such burdens and have a government which looks out for our best interests while seeking to regulate and supervise the conduct of gigantic combinations of industrial enterprises in order that all may enjoy fair play."

THE SANDALWOOD VICTORY.

As announced briefly in our February issue, the Treasury Department acted favorably upon the representations made by the importers of sandalwood, orris root, etc., regarding the construction of paragraph 17 of the tariff law. Treasury Decision 34,174 gives this syllabus of the outcome: "Sandalwood and orris root are not dutiable under paragraph 49, tariff act of 1913, but free of duty under paragraph 477 of the said act."

Assistant Secretary Hamlin's letter to the Collector of Customs at New York is as follows:

"SIR: The department duly received your letter of December 13, 1913, relative to the classification of sandalwood and orris root, in view of the provision in paragraph 49 of the present tariff act for 'all natural . . . odoriferous or aromatic substances, preparations and mixtures used in the manufacture of, but not marketable as, perfumes or cosmetics.'"

"While it would appear that the specific provision in paragraph 49 for ambergris, musk and civet, which it is represented to the department are usually imported in a crude condition, and the further provision for natural aromatic substances, denote an intent on the part of Congress to include in the said paragraph all crude odoriferous or aromatic substances used in the manufacture of perfumes and cosmetics, it will be noted that the other articles mentioned in the said paragraph, namely, enfleurage greases, floral essences by whatever method obtained, and flavoring extracts, are manufactured products, and it will be further noted that all of the articles provided for in the paragraph are, in their condition as imported, ready for use as raw material in the manufacture of perfumes and cosmetics.

"In view of the foregoing, the department concurs in the views expressed by you that sandalwood and orris root are not ejusdem generis with the articles specifically provided for in paragraph 49 and are therefore not dutiable thereunder, but are entitled to admission free of duty under paragraph 477 of the tariff act.

"You will be governed accordingly."

As we said last month, the 20 per cent. rate in paragraph 17 will be applied in a more limited way in relation

to chemical and medicinal compounds, as intended by Congress. The action of the Treasury Department is a complete justification of the activities of the importers and is a striking illustration of the advantage of taking prompt cognizance of similar matters and going at once to the fountain head, if we may say so, to straighten out a tangle which would have resulted in enormous friction, vexation and trouble. Mr. Christian Beilstein, as chairman of the committee which went to Washington last December, is entitled to the congratulations of his confreres and the trade generally for the result, which came more quickly than is usual in controversies with governmental officials. Assistant Secretary Hamlin, also, is to be commended for his prompt consideration and determination of the plea made by the importers.

PARAGRAPH 17 CONSTRUED.

Immediately following the sandalwood decision of the Treasury Department, Assistant Secretary Hamlin issued Treasury Decision 34,184 relating to chemicals and medicinal compounds in packages of two and a half pounds for less. It reverses Treasury Decision 34,035 so far as it affects certain objects. The syllabus follows:

All patent medicines, all proprietary remedies, all chemicals specifically prepared, and all articles which are combined or compounded with the use of chemicals fall within the provisions of paragraph 17, tariff act of 1913. Olive oil, oil of lemon, oil of orange, peanut oil, fish oil, and other rendered, expressed, distilled and essential oils, which are not mixed or compounded with other oils, earths, chalk, crude drugs which are natural and un compounded, and similar articles, do not fall within the provisions of paragraph 17 of the said act. T. D. 34035 of January 2, 1914, modified accordingly.

Secretary Hamlin's letter to the Collector of Customs at New York explains the situation:

"The department duly received your letter of the 7th ultimo, in which, referring to the department's instructions of the 2d idem in T. D. 34,035, directing that ink, oil of sweet almonds, oil of lemon, oil of orange and other articles provided for by name in the tariff act of October 3, 1913, when contained in packages of less than 2½ pounds gross weight, should be assessed with duty at not less than 20 per cent. ad valorem, in view of the specific provision in paragraph 17 of the said act, you invite attention to the decision of the United States Court of Customs Appeals (T. D. 33,858), wherein it was held that chemical substances and mineral substances are to be distinguished for dutiable purposes, and that, as the main constituent of the powder the subject of the decision was a mineral rather than a chemical substance, it was not dutiable as a chemical mixture under paragraph 3 of the tariff act of 1909.

"In the decision cited the court was construing the provisions of paragraph 3 of the act of 1909 for chemical compounds, mixtures and salts. It held, in effect, that the merchandise under consideration—Goddard's plate powder—was not a chemical compound or mixture, because, while a mixture, its principal constituents were not chemicals, but were minerals. The court did not hold that such powder would not be included in a provision for 'chemical compounds and all similar articles.'

"If the provisions of paragraph 17 be limited to articles which are in fact chemical or medicinal compounds or combinations, then the express provision for 'all similar articles' would have no effect.

"Since the publication of T. D. 34,035 it has been represented to the department that a number of articles provided for in Schedule A of the tariff act are not in fact chemical or medicinal compounds or combinations, and are not similar to such compounds or combinations, among them olive oil, enamel paints, ceramic and glass colors, etc.

"The department is of the opinion that the question of whether or not any article provided for in Schedule A or elsewhere in the dutiable schedules of the tariff act falls within the first part of paragraph 17, when put up in individual packages of 2½ pounds or less, is a question of fact in each instance, the question being whether it constitutes a chemical or medicinal compound or combination or an article similar in material, quality, or the use to which it may be applied to such chemical or medicinal compounds.

"The department is further of opinion that all patent medicines or proprietary remedies, *all chemicals synthetically prepared*, and all articles which are combined or compounded with the use of chemicals fall within the provisions of said paragraph. It is further of the opinion, however, that *olive oil, oil of lemon, oil of orange, peanut oil, fish oils and other rendered, expressed, distilled and essential oils which are not mixed or compounded with other oils*, earths, chalk, crude drugs which are natural and un compounded, and similar articles are not similar to chemical and medicinal preparations or combinations, and do not, therefore, fall within the provisions of said paragraph."

THE BLEACHED FLOUR DECISION.

We do not agree with Dr. Wiley in his opinion that the Federal Pure Food and Drug Law "has been killed" by the decision of the Supreme Court in the bleached flour case. Our readers are familiar with this decision, which, as we construe it, means that the use of small quantities of possible poisons was not intended to be prohibited provided the amounts were harmless and did not occur in dangerous combinations. The language used in the decision makes it clear that the Court holds a strong opinion that Congress did not mean to bar poisonous substances in food products unless they were really dangerous to the public health. In the light of this view of the Court it would appear as though the alleged weakness in the law lay in the findings of the Food Inspection Board, which declared certain things "deleterious" on grounds which the courts do not find to be sufficient grounds. This is the exact view which has been held by the scientists opposed to Dr. Wiley. This is the crux of the decision:

"As to the use of the term 'poisonous,' let me state that everything which contains poison is not poison. It depends on the quantity and the combination. A very large majority of the things consumed by the human family contain, under analysis, some kind of poison, but it depends upon the combination, the chemical relation which it bears to the body in which it exists as to whether or not it is dangerous to take into the human system."

OUR TRADE NOTES DEPARTMENT.

Every once in a while we receive a request from an advertiser, invariably one who apparently does not like to do much advertising, requesting or demanding extra free advertising in the reading columns, often submitting enough copy to more than duplicate the regular advertisement

paid for. These intrusions are comparatively infrequent, but usually are received in a bunch. This month we have been invited to print free advertisements as reading matter by three of our friends who evidently were thoughtless. The space they would have used if their effusion had been printed would have occupied *so much of a page* that there would have been little left for other information. Their announcements in the regular advertising department altogether occupy *less than one-third of a page*.

If we had printed in this issue the notices in question our journal would have been held up under the Post Office rules as unmailable unless the word "*advertisement*" was printed after each of the three items.

Our "Trade Notes" department probably interests a great many of our readers more than any other feature, which ought not to be, but is. If we were to print advertising matter in it very soon everybody would change from the advertising pages to the "Trade Notes." For that reason as well as for the Government prohibition, it is impossible always to print therein everything that we would like to print for our friends. Personals, news of new developments, changes in business and items of social and general interest always are welcome, but the old-time "trade write up" puffing a business is barred—both by the Post Office department and ourself.

RESALE OF PATENTED ARTICLES.

The United States Supreme Court has refused to grant a writ of certiorari for review of the case of the Waltham Watch Company seeking to restrain Charles A. Keene, a retail jeweler of New York City, from selling at less than a fixed price watch movements, patented, manufactured and sold by the complainant, thereby establishing the decision of the United States Circuit Court of Appeals at New York in favor of the defendant on the legal merits of the controversy.

Judge Ray, in the trial term, sustained the action of the defendant in selling the watches in which the movements in question were used at whatever price he wished, since they had become his exclusive property and regardless of the fact that every watch sold by the complainant contained a notice that the jobber or retailer thereby bound himself to regard the price agreement, holding that the jobber or retailer, who assented to prices dictated by the owner of a patent or the manufacturer of a patented article, became a party to an illegal combination in restraint of trade.

This decision is in line with those of the United States Supreme Court in the cases of the Bauer Chemical Company vs. O'Donnell, denying the right of complainant to restrain the sale of "sanatogen" below stipulated prices, and of Straus vs. American Publishers' Association, upholding the right of plaintiff to sell at what prices he wished copyright book and awarding him damages for losses incurred by reason of defendants' combination to restrict sales of books where price agreements were not maintained.

Adolph H. Rosenfeld, of New York City, represented Mr. Keene in all the trials of the Waltham Watch Company case.

NATIONAL CHAMBER OF COMMERCE.

In last month's issue we presented some of the features of the annual meeting in Washington of the Chamber of Commerce of the United States. The sessions were well attended and the interest taken fully justified the formation of this important business organization. As will be noticed in the list of officers elected the Flavoring Extract Manufacturers' Association is again represented.

John H. Fahey, of the Boston Chamber of Commerce, was elected president. Other officers elected are as follows: J. N. Teal, Portland, Ore.; A. H. Mulliken, Chicago, Ill.; Robert F. Maddox, Atlanta, Ga., and A. B. Farquhar, York, Pa., vice-presidents; John Joy Edson, District of Columbia, treasurer; James G. Cutler, Rochester, N. Y., chairman Executive Committee.

The following were elected directors: Frederick Bode, Chicago, Ill.; Charles Boettcher, Denver, Colo.; Frederic E. Boothby, Portland, Me.; L. C. Boyd, Indianapolis, Ind.; Thomas Burke, Seattle, Wash.; Paul T. Carroll, San Francisco; H. C. Clarke, Minneapolis, Minn.; Franklin Conklin, Newark, N. J.; James G. Cutler, Rochester, N. Y.; William Harris Douglas, New York; John H. Fahey, Boston, Mass.; Homer L. Ferguson, Newport News, Va.; Charles S. Keith, Kansas City, Mo.; Willoughby M. McCormick, Baltimore, Md.; Charles Nagel, St. Louis, Mo.; John M. Parker, New Orleans, La.; L. J. Petit, Milwaukee, Wis.; John W. Philp, Dallas, Tex.; George Pope, Hartford, Conn.; John M. Reynolds, Rome, Ga.; R. G. Rhett, Charleston, S. C.; William H. Stevenson, Pittsburgh, Pa.; Ralph Stone, Detroit, Mich.; T. L. L. Temple, Texarkana, Ark.; C. E. Yost, Omaha, Neb.

TRADE MARKS IN NEW YORK.

A bill has been introduced in the New York Legislature by Assemblyman Eisner to amend the general business law relative to trade-marks. It prohibits any person except the proprietor of a trade-mark from keeping articles for sale within receptacles to which trade-marks are affixed, except the original contents of the package put there by the owner of the trade-mark, and also from representing in any way that any articles are manufactured by the owner of a trade-mark unless such is the case. It makes detailed provisions for the protection of owners of trade-marks against frauds and unfair competition. A person engaged in manufacturing, selling or packing any article of merchandise with his trade-mark affixed, who files with the Secretary of State a description or facsimile of the trade-mark is to be deemed the proprietor of it. There are also other provisions. The legislature has nearly finished its session and at last accounts it was considered doubtful if the bill would get through.

FACTS ABOUT OIL TESTS.

The editor of *The Perfumery and Essential Oil Record* (February, 1914), continues to labor under the misconception that certain *pure* oils, notably rosemary, have been condemned for not answering certain out-of-date requirements of the present U. S. P."

The rosemary case that our worthy confrère has in mind is that described in notice of judgment No. 2,123. In that case the defendant entered a plea of guilty to a charge of misbranding oil of rosemary. Adulteration was alleged for the reason that the oil differed from the pharmacopœial tests and standards. We protested at the time

(see this journal, September, 1913, page 168), because of the failure of the defendant to put in any defense.

Several cases based on faulty standards were dropped by the prosecuting officers when the defendant's attorneys pointed out certain errata in those standards. We hope that this reiteration will be effective.

AMERICAN CHEMICAL SOCIETY.

The forty-ninth meeting of the American Chemical Society will be held in Cincinnati, Ohio, from April 7 to 10, the meeting of the council being held on the evening of April 6. Headquarters will be in the Sinton Hotel and most of the meetings will take place at the University of Cincinnati. Preparations for the entertainment of the visiting members have gone ahead apace and will be fully up to the usual standard for these conventions. Among the places to be visited will be Procter & Gamble's and the Globe Soap Company's works. There will be concerts, smokers, excursions, etc.

The secretary of the division on pharmaceutical chemistry is A. P. Sy, University of Buffalo, 24 High street, Buffalo, N. Y. Chairman F. R. Eldred, of this division, requests that all chemists expecting to attend its sessions send word in advance to Secretary Sy. Titles of papers must be in the hands of the division secretary before March 21 to insure being placed upon the program.

PROMOTING COMMERCE.

Branch offices of the Bureau of Foreign and Domestic Commerce have been opened in New York, Chicago, New Orleans, and San Francisco, where the bureau's publications, samples of foreign-made products, plans and specifications of construction work abroad, lists of foreign dealers in various lines, manuscript consular reports, and similar documents are available to interested individuals and firms. Reserved addresses in connection with "Foreign Trade Opportunities," published in the Daily Consular and Trade Reports, and referred to frequently in our "Trade Notes," may be obtained by application in letter form from these offices. It is suggested that firms in the districts served by these branch offices acquaint themselves with the material available through these sources, as time may frequently be saved by application to the branch office instead of to the bureau at Washington.

The addresses of the branch offices are as follows: New York, Room 315, United States Custom House; Chicago, 629 Federal Building; New Orleans, Association of Commerce Building; San Francisco, 76-78 Appraisers' Stores Building.

TRADE MARKS IN CENTRAL AMERICA.

It is not generally known, nor is the fact appreciated as it should be by American exporters, that in lower Mexico and in Central America the trade-mark plays a very important part; in truth, a leading part in the sale of foreign manufactures, says Commercial Agent Garrard Harris. The trade-mark has great value in the United States, of course, but its significance is perhaps greater in those countries.

In Central America it is a slow and tedious process to get a line of goods introduced and in general demand. The retailer is not keen to undertake new ventures and would much rather carry the goods in common demand, even if the profit is smaller, for there is not the same danger

of getting stuck as there is with an unknown brand. Most goods are inquired for by their trade-mark names; and if the name is short, sharp, impressive, and one a Spanish-speaking people can easily remember, so much the better. They do remember it, and they call for the article by the name that has become associated with it. If the trade-mark is something they can see and describe, like a star, a crescent, the sun, or a pine tree, or any such object, so much the better.

When an article bearing a catchy or easily remembered name or trade-mark is once introduced, it is fairly certain to have a steady and growing demand if it has sufficient merit to win the approval of users. Trade is helped to some extent by advertising, of course, but a great majority of the customers in these countries are Indians and natives who can not read or write, but who discuss the merits and demerits of an article they know with their friends and neighbors. Such customers are not likely to change from an article which pleases them and which they already know. They remember the name of the one that fills the bill and do not care to learn of any other so long as the former continues satisfactory.

This characteristic of remembering names is also common to the more educated people. Business men, knowing this, make use of the trade-mark idea, and many stores have names such as La Perla, La Estrella, La Fama, or La Reforma. The people know the stores by these names rather than the names of the owners, and the stores are advertised by trade names, which become valuable in themselves as associated with the business.

American manufacturers doing business in these countries and wishing to increase their trade would do well to study this matter of trade-marks. They should arrange for marks and names easily remembered by the Spanish-speaking trade, and if desirous of establishing a permanent business, they should have Spanish labels printed for the goods when required. Manufacturers who appreciate this fact already are well established in certain lines, and have a buying clientele that will not desert them on the first advertising campaign conducted by a competitor, for Central Americans are certain as to what they like and are very conservative about making changes.

HARDENING OF OILS.

R. H. Adams, president of the American Linseed Co., who recently returned from an extended business trip to Europe, attributes considerable importance to the new hardening process of oils, which has been successfully perfected in the last year. In an interview Mr. Adams stated that this process formed the outstanding feature of European oil markets. He stated that much which had been written regarding the actual use of the hardening process was distorted, and its commercial development was known only to a few and, in general, was misunderstood.

"The hydrogenation process," declared Mr. Adams, "is merely in its infancy and is bound to exert a powerful influence upon the oil markets, and will prevent the price of linseed oil from ever going to the low levels which have been reached in certain years of the past."

Mr. Adams stated that the hydrogenation process would not affect linseed oil alone, but as the process was applicable to other vegetable oils and to fish oils, the question of comparative prices would largely determine the extent of consumption in the case of each oil. When Mr. Adams was in Europe a year ago he became convinced that

the hydrogenation process had reached a stage where its commercial utility must be reckoned with as a market factor, and that such has been the case is proved by the increase in oil consumption in Europe during the last year.

Developments in this interesting advance in the oil industry already have been chronicled in our pages and additional information in that direction will be found in future issues of this journal.

DETERMINATION OF ESSENTIAL OILS.

Chattopadhyah, an Indian chemist, has suggested the employment of a new piece of apparatus for the determination of essential oils in spices, aromatic plants, drugs, etc., which is claimed to have advantages over apparatus hitherto used. The amount of essential oil in a drug or spice is usually estimated by distilling a weighed quantity of the specimen with steam and collecting the distillate, from which the oil is extracted, by shaking with ether or other suitable solvent, the latter being afterwards removed, and the residue weighed. As the process is somewhat tedious, and the use of ether as a solvent in tropical places, such as India, is very expensive, the author has devised the following apparatus to effect the same purpose. The apparatus consists of a long-necked flask, the neck of which is graduated to 10 c.c. in one-tenth of a c.c. divisions, and from the bottom of which a swan-neck, like the spout of a teapot, with a ground-in stopper, rises. A weighed quantity of the sample is distilled and the distillate collected in the flask, and after standing the oil is forced into the neck of the flask, all excess of the distillation liquor being run off by means of the exit tube, and the volume of oil is read off in the neck.

NAMING A NEW PERFUME, SOAP, TOILET PREPARATION, OR—CIGAR.

Inventors of new ideas in the perfumery, soap, toilet goods and manufacturers engaged in those industries will find some solace in the following stanzas in the *Western Druggist* on "What Can I Call My Cigar":

I've tried so hard to find a name to call my new cigar.
I've looked in all the papers, and in all the books there are.
At first I sought a pretty name, but now I'd be content
To find one little unclaimed word, no matter what it meant.

But all the names of birds and beasts, and all the names
of things,
And all the names of generals and actresses, and kings,
Yes, all the words that Webster knew, and some he didn't know,
Were claimed for other smokes than mine, so very long ago.

So I shall travel far away to some uncharted shore,
Where man, in all his journeyings, has never been before,
And in the unmapped wilderness, of that far distant land,
I'll find some strange new animal, for which to name my brand.

Likes The American Perfumer.

Editor American Perfumer and Essential Oil Review:

I would not miss a single number of your splendid review.

C. V. MUNRO.

Chicago, Ill., January, 1914.

TRADE MARK DECISION.

COURT OF APPEALS OF THE DISTRICT OF COLUMBIA.

WATERBURY CHEMICAL COMPANY v. REED & CARNRICK.

Decided December 1, 1913.

TRADE-MARKS—"PINOZYME," "PEPTENZYME"—NOT DECEPTIVELY SIMILAR.

The words "Peptenzyne" and "Pinozyme" Held not so similar within the meaning of the trade-mark law as to tend to create confusion in trade.

Mr. Wallace R. Lane for the appellant.

Mr. Alfred W. Kiddle for the appellee.

VAN ORSDEL, J.:

This is an appeal from the Commissioner of Patents in a trade-mark opposition in which appellees seek to prevent appellant from registering the word "Pinozyme" as a trade-mark for certain medicinal preparations.

Appellees allege in their notice of opposition, in substance, that the mark sought to be registered so nearly resembles their mark "Peptenzyne" as to cause confusion in trade. The Examiner of Interferences and the Commissioner sustained the opposition, from which ruling this appeal was taken. It is agreed that the goods to which the marks are applied are similar, and that appellees used their mark long prior to the adoption and use of its mark by appellant. The sole question, therefore, presented by the appeal is, whether the words "Peptenzyne" and "Pinozyme" are so similar, within the meaning of the trade-mark law, as to tend to create confusion in trade.

It is somewhat difficult to determine just what degree of similarity between two marks is sufficient to bring them within the inhibition of the law. But in this case, in the absence of any evidence showing actual confusion, we think there is not such a general similarity between the marks as to cause the average purchaser of the goods to confuse one for the other. The Examiner cited, as decisive of this case, certain cases where the following marks were held to be confusing: "Purock" and "Pureoxia" (*ex parte Hires*, 180 O. G., 879), "Carbolineum" and "Creo-Carbolin" (*in re Barrett Mfg. Co.*, 167 O. G., 513), "Autola" and "Au-to-do" (*in re Wilcox & Co.*, 36 App. D. C., 107), and "Momaja" and "Mojava" (*American Grocery Co. v. Bennett Sloan & Co.*, 68 Fed., 539). We think the marks in issue, where the only similarity consists in the single syllable "zyme" come within the ruling in *Landespriv v. Hall & Ruckel* (36 App. D. C., 532), where the word "Kalodont" was held not to be likely to be confused with "Sozodont," and in the application of the Lasokola Co. (100 O. G., 450), where it was held that "Dermacura" was not in conflict with "Dermakola," and in *Hull & Ruckel v. Ingram* (28 App. D. C., 454), where "Sozodont" was held not to be in conflict with "Zodenta." True, we have the testimony of witnesses on behalf of appellees to the effect that in their opinion the use of the marks would create confusion, but this is counterbalanced by the witnesses for appellant, who testified to the contrary. We agree with the statement of the Assistant Commissioner that—"such testimony is not of great assistance in determining the question whether there is such similarity as to justify a refusal to register under the statute; the effect of the marks upon the mind of the tribunal having to consider the question must be the controlling factor."

Applying this test, we are impelled to the conclusion that the marks are not so similar as to be likely to create confusion in trade.

It appears in the opinion of the Assistant Commissioner that there is a registered trade-mark issued upon goods similar to those on which the marks in question are used consisting of the word "Panzyne." While we are only concerned with the marks in opposition, it may be suggested that it is still within the power of the Commissioner to inquire into the similarity between this mark and the mark of appellant. The decision of the Commissioner of Patents is reversed, and the clerk is directed to certify these proceedings as by law required.

Reversed.

NATURAL AND ARTIFICIAL CIVET

By H. MANN

The natural civet is the secretion of the civet cat (*Viverra civetta*) which is found in a two-chambered gland on the belly of the animal. Most of the commercial civet originates in Abyssinia in Africa, where these civet cats are among the domestic animals. Other civet cats produce the secretion, but in them it is present in such small quantities that it cannot be considered as commercially available. We find civet cats on the coast of Malabar, in China, in Java, Sumatra and Borneo, also in Bengal and the Malay Islands, and one species is found in Burma whose secretion is particularly sharp.

As already mentioned, the African civet cat furnishes most of the civet. It is a long, gray cat with black stripes and a pointed head. To obtain the civet the animal is simply caught and the gland is squeezed out or scraped out with a small round horn spoon. The gland when filled empties itself. The civet is stored in horns after grass and plant debris are removed from it as much as possible. In some regions the animal is confined in a box and allowed to starve. It is then allowed to escape through a narrow hole, so that the glands are emptied and the civet flows down on the inner wall of the box.

The civet when in a very fresh state is a limpid liquid of sirupy consistency, but it becomes more viscous on exposure to air, and its color, at first horny-yellow, becomes brownish. For transportation the civet remains in the ox horn which is closed on top by tying a piece of leather over the open end. The civet as found on the market usually contains some of the hairs of the animal, but is otherwise in a very pure state. Of course, strongly adulterated lots reach the market also, especially in years when civet is expensive. Old butter, honey, vaselin and also the feces of the civet cat are used as adulterants, so that in buying directly great care must be used.

The chief export harbor is Aden, where the greatest quantities of civet are brought. The Abyssinian civet is gathered mostly in Obok and in Djibouti whence it is transported to Aden, which is in fact the market for the article.

For the perfumer the civet is of similar value as is musk. It serves, dissolved in alcohol, as a fixing agent in the manufacture of handkerchief perfumes, but cannot be used with all nuances. The perfumer must always take care that the civet odor harmonizes with the other odors used. In order to make an infusion of civet, it is brushed on to narrow strips of filter paper and these thrown into a wide mouthed vessel having a double walled neck. In the vessel the necessary alcohol has already been placed and slightly warmed. The double wall of the neck is filled with cold glycerin, and after all the civet has been placed in it, the vessel is closed with a tight-fitting cover. It is then placed on a water bath and heated to about 50 degrees C. The vaporized alcohol condenses on the cold double walled neck and flows back into the vessel. In this

way all loss due to evaporation is prevented. The contents are then thoroughly shaken a few times so as to bring the warm alcohol in contact with all parts of the civet, and then allowed to settle. The liquid of a golden yellow color, is filtered and the residue treated as before, only the alcohol is now heated to 65 degrees C. With this second infusion the next lot of civet is extracted.

The residues, which should consist only of a few hairs and small quantities of other impurities, are dried altogether with the filter paper, and the whole macerated and used for the manufacture of sachet powders. If a smeary residue remains on the filter, it is a sure indication that the civet has been adulterated with fat, vaselin, or some other alcohol-insoluble material.

Various kinds of artificial civet have been made, some which, however, contain an appreciable percentage of the genuine substance. The artificial civets are directly soluble in alcohol without leaving any residue; some of them have the drawback of turning red, almost brown, after a short time, which probably indicates the presence of indol. The various brands and grades of artificial civet on the market vary quite considerably. Some of them are quite excellent, and have only a slight coloration, which, however, disappears when the tincture is added to perfumes. Some of it is offered in powdered form, which dissolves very freely, and gives an excellent effect. Twenty-thirty grams of civet in 1,000 grams of alcohol give a sufficiently strong infusion, and these proportions can also be utilized for the artificial civet, while only 15-17 grams of the powdered artificial civet should be used. It is important to compare the strength of the infusions used heretofore, with the strength of the infusions made from the powdered artificial civet, and to adjust the latter to the previously used strength so that the perfume may not be spoiled by too strong an infusion, as the civet odor is very penetrating when applied in wrong proportions.

The effect of the civet varies with different persons, just as in the case of musk. The Caucasians in general, and the Europeans in particular, find the civet odor disgusting, and many a laboratory assistant is unable to make a civet infusion, as the sharp odor nauseates him and a strong headache sets in. On the other hand, we note that the Javanese prize the odor of civet more highly than that of musk, and whole tribes anoint their bodies and hair with civet or with a solution of civet and white paraffin oil, which is now frequently imported from Europe. These solutions have additions of a few well-smelling substances like artificial rose oil. We also find negro tribes on the Gold Coast of Central Africa who prefer pomades with a large content of civet. They too anoint their bodies with it and are very fond of a perfume of civet and oil of citronella. For all these preparations, the natural as well as the artificial civet can be used, the one in

powder form being very readily soluble in warm oil.

In the Sudan, perfumes strongly scented with infusion sell very well. Most of these consist of a base of heliotrope solution, to which much civet has been added, also Bourbon geranium oil and some patchouly oil. Some vanillin, kananga oil, oil of jasmin and small quantities of lavender oil are also found in these perfumes.

A very similarly constituted perfume finds favor in China, where it is very popular even with the better

class of Chinese, only the civet is not quite so predominant as in the first perfume. Moreover, we find in it a strong addition of cumarin, orris oil and a trace of cloves. But in South America also these strong smelling perfumes are very popular; here, however, a rose nuance is emphasized, obtained with oil of geranium, or, when the price allows it, with artificial rose oil. From the above, it is apparent that the extensive use of civet is very remunerative, but the matter must, of course, be thoroughly studied.

UTILIZING SOAP WEED IN THE WEST

Settlers in western Kansas are cutting and marketing soap weed, or Spanish bayonet, to supply the demands of soap manufacturers, according to a report recently re-

Yucca bacata, a species with exceptionally large fruits, is the most used. The soap manufacturers, however, utilize the tops or the roots.

Manufacturers are paying \$8 a ton for the plant at the railway stations, while the estimated cost of cutting, drying, baling and hauling ranges from \$5 to \$6, depending upon the distance to the railroad. Since a man can ordinarily get out a ton a day, the gathering of the soap weed affords an opportunity to secure a fair day's wages at a time when other ranch activities are not pressing. After cutting, the soap weed is allowed to dry from 60 to 90 days, and then is baled up in the ordinary broom-corn baling machine.

For a long time this weed has been made into a soapy



YUCCA BACATA—THE GROWING PLANT.

ceived from officers of the Kansas national forest (by the Forest Service, United States Department of Agriculture). There are various plants in the southwest locally known as soap weed, called amole by the Mexicans, but the one gathered by the Kansas farmers, technically known as



YUCCA BACATA—THE RIPE FRUIT.

decoction which the Indian and Mexican women have used, particularly for washing their hair, for which purpose it is considered especially suited, since it contains no alkali. Present-day soap manufacturers use it for toilet and wool soaps. Its qualities have been known for a long time, but the harvesting of soap weed is just now becoming commercially important.

The industry is now operating on lands adjacent to the Kansas National Forest, and it is expected that the demand will soon spread to that forest, some portions of which bear an abundant supply of the plant. There is a plentiful supply of it throughout southern Colorado, Arizona, New Mexico and Texas.

Forest officers have considered this weed a nuisance, since it is the nature of the plant to spread over extensive areas and kill off other vegetation. It is particularly a pest on stock ranges. In line with its policy of range improvement the government is anxious to rid the forage areas of all such injurious plants, and it is the hope of the forest officers that the commercial demand for soap weed will soon reach such proportions that it will not only take an otherwise useless product, but also will eradicate it from areas which could be utilized to better advantage for the supplying of forage to cattle and sheep.

THE SOAP MAKING INDUSTRY

By DR. E. G. THOMSEN, Washington, D. C.

(Continued from page 297, February, 1914.)

Olive Oil, which comes from the fruit of the olive trees, varies greatly in quality, according to the method by which it is obtained and according to the tree bearing the fruit. Three hundred varieties are known in Italy alone. Since the larger portion of olive oil is used for edible purposes, a lower grade, denatured oil, denatured because of the tariff, is used for soap manufacture in this country. The oil varies in color from pale green to golden yellow. The percentage of free acid in this oil varies greatly, though the oil does not turn rancid easily. It is used mainly in the manufacture of white castile soap.

Olive oil foots, which is the oil extracted by solvents after the better oil is expressed, finds its use in soap making mostly in textile soaps for washing and dyeing silks and in the production of green castile soaps.

Other oils, as poppy seed oil, sesame oil, cottonseed oil, rape oil, peanut (arachis) oil, are used as adulterants for olive oil, also as substitutes in the manufacture of castile soap, since they are cheaper than olive oil.

Cottonseed Oil is largely used in the manufacture of floating and laundry soaps. It may be used for toilet soaps where a white color is not desired, as yellow spots appear on a finished soap in which it has been used after having been in stock a short time.

Corn Oil and Soya Bean Oil are also used to a slight extent in the manufacture of toilet soaps, although the oils form a soap of very little body. Their soaps also spot yellow on aging.

Corn oil finds its greatest use in the manufacture of soap for washing automobiles. It is further employed for the manufacture of cheap liquid soaps.

Fatty Acids are also used extensively in soap manufacture. While the soap manufacturer prefers to use a neutral oil or fat, since from these the by-product glycerine is obtained, circumstances arise where it is an advantage to use the free fatty acids. Red oil (oleic acid, elaine) and stearic acid are the two fatty acids most generally bought for soap making. In plants using the Twitchell process, which consists in splitting the neutral fats and oils into fatty acids and glycerine by dilute sulphuric acid and producing their final separation by the use of so-called aromatic sulphonic acids, these fatty acids consisting of a mixture of oleic, stearic, palmitic acids, etc., are used directly after having been purified by distillation, the glycerine being obtained from evaporating the wash water.

Oleic acid (red oil) and stearic acid are obtained usually by the saponification of oils, fats and greases by water and acid under pressure or by lime and sulphuric acid. The fatty acids thus are freed from their combination with glycerine and solidify upon cooling, after which they are separated from the water and pressed at a higher or lower temperature. The oleic acid, being liquid at ordinary temperature, together with some stearic and palmitic acid, is thus pressed out. These latter acids are usually separated by distillation, combined with the press cake further purified and sold as stearic acid.

The red oil, sometimes called saponified red oil, is often

semi-solid, resembling a soft tallow, due to the presence of stearic acid. The distilled oils are usually clear, varying in color from light to a deep brown. Stearic acid, which reaches the trade in slab form, varies in quality from a soft brown, greasy, crumbly solid of unpleasant odor to a snow white, wax-like, hard, odorless mass. The quality of stearic acid is best judged by the melting point, since the presence of any oleic acid lowers this. The melting point of the varieties used in soap manufacture usually ranges from 130° to 135° F. Red oil is used in the manufacture of textile soaps, replacing olive oil foots soap for this purpose, chlorophyll being used to color the soap green. Stearic acid, being the hard firm fatty acid, may be used in small quantities to give a better grade of soap body and finish. In adding this substance it should always be done in the crutcher, as it will not mix in the kettle. It finds its largest use for soap, however, in the manufacture of shaving soaps and shaving creams, since it produces the non-drying creamy lather so greatly desired for this purpose. Both red oil and stearic acid being fatty acids, readily unite with the alkali carbonates, carbon dioxide being formed in the reaction and this method is extensively used in the formation of soap from them.

RANCIDITY OF OILS AND FATS.

Rancidity in neutral oils and fats is one of the problems the soap manufacturer has to contend with. The mere saying that an oil is rancid is no indication of its being high in free acid. The two terms rancidity and acidity are usually allied. Formerly, the acidity of a fat was looked upon as the direct measure of its rancidity. This idea is still prevalent in practice and cannot be too often stated as incorrect. Fats and oils may be *acid*, or *rancid*, or *acid and rancid*. In an acid fat there has been a hydrolysis of the fat and it has developed a rather high percentage of free acid. A rancid fat is one in which have been developed compounds of an odoriferous nature. An acid and rancid fat is one in which both free acid and organic compounds of the well known disagreeable odors have been produced.

It cannot be definitely stated just how this rancidity takes place, any more than just what are the chemical products causing rancidity. The only conclusion that one may draw is that the fats are first hydrolyzed or split up into glycerine and free fatty acids. This is followed by an oxidation of the products thus formed.

Moisture, air, light, enzymes (organized ferments) and bacteria are all given as causes of rancidity.

It seems very probable that the initial splitting of the fats is caused by enzymes, which are present in the seeds and fruits of the vegetable oils and tissue of animal fats, in the presence of moisture. Lewkowitsch strongly emphasizes this point and he is substantiated in his idea by other authorities. Others hold that bacteria or microorganisms are the cause of this hydrolysis, citing the fact that they have isolated various microorganisms from various fats and oils. The acceptance of the bacterial action would explain the various methods of preservation of oils and fats by the use of antiseptic preparations. It can-

not, however, be accepted as a certainty that bacteria cause the rancidity of fats.

The action of enzymes is a more probable explanation.

The hydrolysis of fats and oils is accelerated when they are allowed to remain for some time in the presence of organic non-fats. Thus, palm oil, lower grades of olive oil and tallow which have been in contact with the animal tissue for a long time, all contain other nitrogenous matter and exhibit a larger percentage of free fatty acid than the oils and fats not containing such impurities.

Granting this initial splitting of the fat into free fatty acids and glycerine, this is not sufficient explanation. The products thus formed must be acted upon by air and light. It is by the action of these agents that there is a further action upon the products and from this oxidation we ascertain by taste and smell (chemical means are still unable to define rancidity) whether or not a fat is rancid. While some authorities have presumed to isolate some of these products causing rancidity, we can only assume the presence of the various possible compounds produced by the action of air and light which include oxy fatty acids, lactones, alcohols, esters, aldehydes, etc.

The soap manufacturer is interested in rancidity to the extent of the effect upon the finished soap. Rancid fats form darker soaps than fats in the neutral state, and very often carry with them the disagreeable odor of a rancid oil. Further, a rancid fat or oil is usually high in free acid. It is by no means true, however, that rancidity is a measure for acidity, for as already pointed out, an oil may be rancid and not high in free acid.

The percentage of free fatty acid is of even greater importance in the soap industry. The amount of glycerine yield is dependent upon the percentage of free fatty acid and is one of the criterions of a good fat or oil for soap stock.

PREVENTION OF RANCIDITY.

Since moisture, air, light and enzymes, produced by the presence of organic impurities, are necessary for the rancidity of a fat or oil, the methods of preventing rancidity are given. Complete dryness, complete purification of fats and oils and storage without access of air or light are desirable. Simple as these means may seem, they can only be approximated in practice. The most difficult problem is the removal of the last trace of moisture. Impurities may be lessened very often by the use of greater care. In storing it is well to store in closed barrels or closed iron tanks away from light, as it has been observed that oils and fats in closed receptacles become rancid less rapidly than those in open ones, even though this method of storing is only partially attained. Preservatives are also used but only in edible products, where their effectiveness is an open question.

CHEMICAL CONSTANTS OF OILS AND FATS.

Besides the various physical properties of oils and fats, such as color, specific gravity, melting point, solubility, etc., they may be distinguished chemically by a number of chemical constants. These are the iodine number, the acetyl value, saponification number, Reichert-Meissl number for volatile acids, Hehner number for insoluble acids. These constants, while they vary somewhat with any particular oil or fat, are more applicable to the edible products and are criterions where any adulteration of fat or oil is suspected. The methods of carrying out the analyses of oils and fats to obtain these constants are given in the various

texts* on oils and fats, and inasmuch as they are not of great importance to the soap industry they are merely mentioned here.

OIL HARDENING OR HYDROGENATING.

It is very well known that oils and fats vary in consistency and hardness, depending upon the glycerides forming same. Olein, a combination of oleic acid and glycerine, as well as oleic acid itself largely forms the liquid portion of oils and fats. Oleic acid ($C_{18}H_{34}O_2$) is an unsaturated acid and differs from stearic acid ($C_{18}H_{36}O_2$), the acid forming the hard firm portion of oils and fats, by containing two atoms of hydrogen less in the molecule. Theoretically it should be a simple matter to introduce two atoms of hydrogen into oleic acid or olein, and by this mere addition convert liquid oleic acid and olein into solid stearic acid and stearine.

For years this was attempted and all attempts to apply the well known methods of reduction (addition of hydrogen) in organic chemistry, such as treatment with tin and acid, sodium amalgam, etc., were unsuccessful. In recent years, however, it has been discovered that in the presence of a catalyzer nickel in finely divided form or the oxides of nickel are usually employed, the process of hydrogenating an oil is readily attained upon a practical basis.

The introduction of hardened oils has opened a new source of raw material for the soap manufacturer in that it is now possible to use oils in soap making which were formerly discarded because of their undesirable odors. Thus fish or train oils which had up to the time of oil hydrogenating resisted all attempts of being permanently deodorized, can now be employed very satisfactorily for soap manufacture. A Japanese chemist, Tsujimoto¹ has shown that fish oils contain an unsaturated acid of the composition $C_{18}H_{32}O_2$ for which he proposed the name clupanodonic acid. By the catalytic hardening of train oils this acid passes to stearic acid and the problem of deodorizing these oils is solved.²

At first the introduction of hardened oils for soap manufacture met with numerous objections, due to the continual failures of obtaining a satisfactory product by the use of same. Various attempts have now shown that these oils, particularly hardened train oils, produce extraordinarily useful materials for soap making. These replace expensive tallow and other high melting oils. It is of course impossible to employ hardened oils alone, as a soap so hard would thus be obtained that it would be difficultly soluble in water and possess very little lathering quality. By the addition of 20-25% of tallow oil or some other oil forming a soft soap a very suitable soap for household use may be obtained. Ribot³ discusses this matter fully. Hardened oils readily saponify, may be perfumed without any objections and do not impart any fishy odor to an article washed with same. Meyerheim⁴ states that through the use of hydrogenated oils the hardness of soap is extraordinarily raised, so that soap made from hardened cottonseed oil is twelve times as hard as the soap made from ordinary cottonseed oil. This soap is also said to no longer spot yellow upon aging, and as

*Official Methods, see Bull. 107, A. O. A. C., U. S. Dept. Agricult. Journ. Coll. of Engin. Tokyo Imper. Univ. (1906), p. 1. Abs. Chem. Revue f. d. Fett-u. Harz, Ind. 16, p. 84; 20, p. 8.

² Meyerheim—Fogg. der Chem., Physik. und Physik. Chem. (1913), 8, 6, p. 293-307.

³ Seiffa. Ztg. (1913), 40, p. 142.

⁴ Loc. cit.

a consequence of its hardness, is able to contain a considerably higher content of rosin through which lathering power and odor may be improved. Hardened oils can easily be used for toilet soap bases, provided they are not added in too great a percentage.

The use of hardened oils is not yet general, but there is little doubt but that the introduction of this process goes a long way toward solving the problem of cheaper soap material for the soap making industry.

GREASE.

Grease varies so greatly in composition and consistency that it can hardly be classed as a distinctive oil or fat. It is obtained from refuse, bones, hides, etc., and while it contains the same constituents as tallow, the olein content is considerably greater, which causes it to be more liquid in composition. Grease differs in color from an off white to a dark brown. The better qualities are employed in the manufacture of laundry and chip soap, while the poorer qualities are only fit for the cheapest of soaps used in scrubbing floors and such purposes. There is usually found in grease a considerable amount of gluey matter, lime and water. The percentage of free fatty acid is generally high.

The darker grades of grease are bleached before being used. This is done by adding a small quantity of sodium nitrate to the melted grease and agitating, then removing the excess salt-peter by decomposing with sulphuric acid. A better method of refining, however, is by distillation under diminished pressure.

ROSIN (COLOPHONY, YELLOW ROSIN, RESINA).

Rosin is the residue which remains after the distillation of turpentine from the various species of pines. The chief source of supply is in the States of Georgia North and South Carolina. It is a transparent, amber colored hard pulverizable resin. The better grades are light in color and known as water white (w. w.) and window glass (w. g.). These are obtained from a tree which has been tapped for the first year. As the same trees are tapped from year to year, the product becomes deeper and darker in color until it becomes almost black.

The constituents of rosin are chiefly (80-90%) abietic acid or its anhydride together with pinic and sylvic acids. Its specific gravity is 1.07-1.08, melting point about 152.5 C., and it is soluble in alcohol, ether, benzene, carbon disulfide oils, alkalis and acetic acid. The main use of rosin, outside of the production of varnishes, is in the production of laundry soaps, although a slight percentage acts as a binder and fixative for perfumes in toilet soaps and adds to their detergent properties. Since it is mainly composed of acids, it readily unites with alkaline carbonates, though the saponification is not quite complete and the last portion must be completed through the use of caustic hydrates, unless an excess of 10% carbonate over the theoretical amount is used. A lye of 20° B. is best adapted to the saponification of rosin when caustic hydrates are employed for this purpose, since weak lyes cause frothing. While it is sometimes considered that rosin is an adulterant for soap, this is hardly justifiable, as it adds to the cleansing properties of soap. Soaps containing rosin are of the well known yellowish color common to ordinary laundry soaps. The price of rosin has so risen in the last few years that it presents a problem of cost to the soap manufacturer considering the price at which laundry soaps are sold.

ROSIN SAPONIFICATION.

As has been stated, rosin may be saponified by the use of alkaline carbonates. On account of the possibility of the soap frothing over, the kettle in which the operation takes place should be set flush with the floor, which ought to be constructed of cement. The kettle itself is an open one with round bottom, equipped with an open steam coil and skimmer pipe, and the open portion is protected by a semi-circular rail. A powerful grid, having a 3-inch mesh covers one-half of the kettle, the sharp edges protruding upwards.

The staves from the rosin casks are removed at the edge of the kettle, the rosin placed on the grid and beaten through with a hammer to break it up into small pieces.

To saponify a ton of rosin there are required 200 lbs. soda ash, 1,600 lbs. water and 100 lbs. salt. Half the water is run into the kettle boiled, and then the soda ash and half the salt added. The rosin is now added through the grid and the mixture thoroughly boiled. As carbon dioxide is evolved by the reaction the boiling is continued for one hour to remove any excess of this gas. A portion of the salt is gradually added to grain the soap well and to keep the mass in such condition as to favor the evolution of gas. The remainder of the water is added to close the soap and boiling continued for one or two hours longer. At this point the kettle must be carefully watched or it will boil over through the further escape of carbon dioxide being hindered. The mass, being in a frothy condition, will rapidly settle by controlling the flow of steam. The remaining salt is then scattered in and the soap allowed to settle for two hours or longer. The lyes are then drained off the top. If the rosin soap is required for toilet soaps, it is grained a second time. The soap is now boiled with the water caused by the condensation of the steam, which changes it to a half grained soap suitable for pumping. A soap thus made contains free soda ash 0.15% or less, free rosin about 15%. The mass is then pumped to the kettle containing the soap to which it is to be added at the proper stage. The time consumed in thus saponifying rosin is about five hours.

(To be continued.)

AROMATIC GRASS OILS.

In addition to work on citronella and lemongrass oils and on oils from three species of *Cymbopogon*, which have not previously been used as commercial sources of essential oil, the results of the examination of samples of vetiver or cuscus roots and oil from the Seychelles and Fiji are given.

	Fiji vetiver oil.	Seychelles vetiver oil.
Sp. gr. at 15°/15° C.	1.0298	
Opt. rotation in 100 mm. tube at 20° C.	—	1.0282
Acid value.....	—	+27°
Saponif. value.....	35.3	55.9
Solubility in alcohol	Clear solution with 2.5 vols. of 80 per cent. alcohol; cloudy on adding more alcohol.	Clear solution with 1 vol. of 80 per cent. alcohol, and not appreciably cloudy with 7-8 vols. of the alcohol.

The Fiji oil is superior to Reunion vetiver oil and would find a ready market in Europe. The yield of oil from Seychelles vetiver roots (0.48 per cent.) is equal to that obtained in practice from Indian roots, and the oil is of excellent quality.

THE PRESERVATIVE ACTION OF ESSENTIAL OILS

J. R. RIPPETOE, P. D. and L. E. WISE, PH. D.

INTRODUCTION.

The present status of food preservatives in this country is a peculiar one. The past few years have shown that the addition of benzoate and salicylate of soda to food preparations is frowned upon, even if the chemicals themselves are not—in the opinion of some food experts—of a highly deleterious nature. Nor is the use of inorganic preservatives viewed with much favor. Copper salts, the sulphites, the fluorides, boric acid, all have had their detractors and all of them are gradually leaving the formulae of the manufacturers. Added preservatives of this type may, therefore, be considered (temporarily at least) under the ban.

And yet, foods, beverages and pharmaceutical products which act as culture media for various bacteria and which will permit the growth of mold must of necessity be preserved in order to make them articles of commerce. There is indeed one class of natural products which has for ages past been used perhaps unwittingly by house wives and manufacturers in the preservation of their food stuffs. We have reference to the spices, and especially to cinnamon, mustard and cloves, which, as a recent investigation by Hoffmann and Evans¹ has shown—are highly preservative in their action towards spore forming bacilli and the yeasts. It seems quite reasonable to assume that the preservative nature of these spices may be directly traced to their specific and characteristic constituents, the essential oils, and it is an investigation of the action of these oils that has been set forth in this report.

The antiseptic action of many of the common (and not a few of the less well-known) essential oils has been made the subject of some extended researches,² although their preservative action has received little attention in the literature.

In 1895, Weinsche³ mentioned the fact that menthol, the terpene-alcohol of peppermint, when in a dilution of 1 to 3,000, arrested the growth of comma and cholera bacilli.

In 1902, Calvello⁴ stated that a 7 to 8 per cent. emulsion of cinnamon oil and an 11 per cent. solution of oil of thyme had the same effect in sterilization as a 1 per cent. solution of corrosive sublimate, and that oil of cinnamon, in an emulsion carrying 9 per cent. of the oil, effected complete sterilization. Furthermore, the disagreeable, "secondary" effects of mercuric chloride were not apparent.

In 1903, Marx,⁵ continuing the previous work of Konradi examined terpineol, vanillin, heliotropin, and other substances of an aromatic nature, for the same purpose. The development of such pathogenic organisms as the resistant anthrax spores and staphylococci pyogenes aureus were arrested by the substance under investigation. A saponaceous emulsion of terpineol was found to be strongly antiseptic. Marx advanced the theory that the degree of bactericidal action was directly dependent on the oxygen-

activating power of aromatic examined—i. e., the alleged property that these substances have for rendering oxygen more active as a germicide.

The same year R. Kobert⁶ in an article on the "Pharmac—therapeutics of Aethereo-Oleosa," mentioned the antimicrobial properties of essential oils, and stated that the oil of turpentine when exposed to the air, prevented putrefaction, that limonene and methyl salicylate were both disinfectants and that menthol and thymol were of value as antiseptic in dental use.

Heller⁷ investigated the toxic effect on plants of the vapor of certain essential oils. He found that in the liquid state or in aqueous solution, these oils were much less potent in their effect. Vandeveld⁸ compared the poisonous character of different essential oils and their constituents by means of parmlolysis, comparing their toxicity with that of ethyl alcohol (taken as 100). He found that thymol, menthol, cinnamic aldehyde, oils of cassia, cloves, white thyme, cinnamon and red thyme were all more than one hundred times as powerful as the standard; that peppermint, nutmeg, and star anise were more than fifty times as toxic, and that carvone, benzaldehyde, oil of bitter almonds, caraway, terpeneless lemon, neroli, angelica, anise (anethal), cognac and lemon were all more potent in their action than the alcohol itself.

In 1904, Liebreich⁹ reported the germicidal action of oil of mustard. About the same time Hall¹⁰ published a research on the bactericidal and antiseptic action of the constituents of eucalyptus oil. He stated that cineol was the least active of the eucalyptus components and that aromadendral, piperitone and phellandrene were its most active bodies. *B. coli communis* was experimented upon. The author claimed that ozonized oils increased the antiseptic value of cineol—and he recommended their use in medicine.

In 1906, K. Kobert¹¹ and his co-worker Bruning¹² determined the relative antiseptic values of a large number of volatile oils, depending on the inhibitory action of these oils on the hydrogen sulphide generation which normally takes place through the action of bacteria in milk containing finely powdered sulphur. Their articles are well worthy of note, and we do not think it out of place to give a brief resume of their results.

Kobert found that oils of amber, anise, bergamot, calamus, cardamom, cedarwood, celery, copaiba, cubeb, cumin, cypress, erigeron, estragon, fennel, ginger, juniper, savin, turpentine (free from oxygen), valerian, and wintergreen—were all very feeble in their action; that angelica, citronella, geranium, jaborandi, lavender, patchouli, peppermint, peruvian balsam, pinus, montana, rue, sandalwood, tansy, thyme, wild thyme and wormwood were feeble; that basil, eucalyptus, linaloe, niobe, orange blossom, palmrosa, pennyroyal, rosemary and sage oils were intermediate; that bay, cajuput, caraway, coriander, dill, double caraway, jasmine, pine needle, spearmint, spoonwort, ozonized tur-

¹ J. Industrial and Eng. Chemistry, November, 1911, 835.

² We wish at this point to state that many of the references to the bactericidal action of the essential oils have been found in the excellent physiological and pharmacological notes of Schimmel's Reports. For the earlier literature much information has been gained from Sternberg's *Text-book of Bacteriology*.

³ Therapeut. Monatshefte, No. 9.

⁴ Pharm. Ztg. 47, 759.

⁵ Centralbl. für Bacteriologie u Parasiten Krankheiten, 33, 1-74.

⁶ Schimmel's Report, October, 1903.

⁷ Thesis, Leipzig, 1903.

⁸ Bull. de l'Assoc. Belg des chin 17, 269.

⁹ Ther. Monatshefte 18, 65.

¹⁰ F. D. Chem. Industry XXIII (1904), 1233.

¹¹ Schimmel's Report, October, 1906.

¹² Centrbl. für un Medizin, 27, No. 14.

petine, wormwood and ylang ylang oils were strong; and that bitter almond, cassia, cherry laurel, cinnamon, mustard and spike oils were very powerful antiseptics. Of the important constituents of essential oils, and certain others Kobert found that ethyl alcohol and santalol, citral and heliotropin, muskone and thujone, anethol, apiol, isomyristicin, isosafrol, methyl chavicol and thymol, camphene, phellandrene and the terpenes of dill and rosemary oils all showed *very feeble* antiseptic properties; that citronellol, geraniol, safrol, pinene, and the terpenes of bay and citronella oils all showed slight antiseptic value; that carvone, pulegone, menthyl-heptenone, myristicin, terpinene, were moderate bactericides; that furfuric alcohol, linalool, terpineol, fenchone, menthone, eugenol and limonene were strong in their action and that benzyl alcohol, anisic aldehyde, benzaldehyde, cinnamic aldehyde and isoeugenol were very powerful as inhibitory agents. His work further shows that most esters such as amyl and methyl salicylate, bornyl acetate and valerianate and linalyl acetate are very poor, and that only benzyl acetate and methyl benzoate may be taken as moderate antiseptics. Cymene and cineol may be described as medium in their bactericidal value and $C_{10}H_{16}O_2$ —the active principle of wormseed oil (known as "ascaridol"), is very powerful in its action.

There are several interesting differences between the observations of Kobert and those of Bruning. The latter placed bitter almond oil and terpinene among the very weak antiseptics, while the former stated that almond oil was a very powerful and that terpinene was a mild antiseptic. Less striking differences are also to be noted in oils of turpentine (ozone and free from oxygen) in dill, pine needle, and coriander oils and in linalool, spoonwort oil and terpineol. These variations may have been due to the bacteria-content of the milk; to change or decomposition of the substance tested or to the doubtful blackening of lead acetate paper. Both investigators noted the weak antiseptic character of the terpenes and both claim that terpeneless oils are useful in medicine.

In 1906, as well, we find the work of Kettenhofen¹³ on the destructive influence of ylang-ylang oil on micro-organisms.

In 1907, Bruning¹⁴ published an article on the patent active principle, of chenopodium oil— $C_{10}H_{16}O_2$. K. Kobert¹⁵ also continued his noteworthy researches on the bactericidal value of essential oils—and investigated the differences between terpene and terpeneless oils of the same source. His results show that in general it can be assumed that terpeneless oils are at least as powerful in their action as those containing terpenes, and that in certain cases (such as oils of bergamot and citronella) the terpene free variety were the more powerful antiseptics. He also recorded the fact that the same influence was exerted by various oils on pure cultures, as on the normal milk bacteria, referred to in his former research.

1910 Gilmour¹⁶ studied the relative germicidal values of essential oils used in dental surgery. Oils of cassia, cinnamon, cloves and bay (in the order named) head the list as valuable bactericides. These are followed by peppermint, eucalyptus, thyme and cajuput, while oil of gautheria is mentioned as being of insufficient value for the root canal dressing.

Martindale,¹⁷ that same year published the outcome of a series of examinations of aqueous and saponaceous solutions of oils, compared with that solution phenol which represents the minimum strength necessary to destroy a specific organism. Assuming that *a* was the percentage of carbolic acid solution required for this purpose, that *b* was the percentage of oil required under similar conditions, he termed *a/b* the "phenol coefficient" and established this ratio for a large number of oils. The highest coefficient naturally indicates the highest antiseptic value. The following oils or constituents together with their respective coefficients have been listed:

Origanum (W-25.76), thymol (S-25.29), carvacrol (S-21.32), thymol (W-19.41), thyme oil (S-14.85, W-13.38), geraniol (S-12.29), cinnamon leaf oil (S-9.66), cinnamon bark oil (S-8.91), clove oil (S-8.88), cinnamic aldehyde (S-8.0), citronellol (S-8.11), cinnamon oil (S-7.92, W-7.11), rosemary oil (S-5.94), otto or rose (S-5.94), cassia oil (S-5.35), wintergreen oil (S-4.64), eucalyptus (amygdalina) (S-4.35), lavender oil (Mitcham) (S-4.94), lemon oil (S-3.94), bitter almond oil (S-3.76), eucalyptol (S-3.76), eucalyptus-globulus (S-3.55), sandalwood (S-1.67), birch tar oil (S-1.67), cade oil, less than one.

The results (especially those involving cassia, which is apparently weaker than rosemary, and bitter almond oil which is even less potent than oil of lemon) are not entirely in accord with those of Kobert which have been summarized above.

CONCLUSIONS.—The following act as preservatives: Oils of bitter almond, bitter almond no acid, betula, cajuput, cardamon, cassia, chenopodium, cinnamon, citronella, cloves, coriander, cumin, eucalyptus, rose geranium, horse-mint, lavender, mace, marjoram, mustard art, neroli, origanum, peppermint, pimenta, tar, rose, rosemary, saffrafrs and thyme and menthol, terpineol and thymol.

Oils of angelica, calamus, celery, cubeb, lemon, orange peel, black pepper, pinus, pumilio, santal and turpentine do not act as preservatives.

The preservative action of the following is questionable: Oils of anise, bergamot, caraway seed, dill, fennel, ginger, hedeoma, juniper berries, lemongrass, nutmeg, pine (abies pectinata), spearmint and tansy and citral.—*Journal Am. Ph. A.*

¹⁷ Perfume and Ess. Oil Record, 1, 266.

¹⁸ W indicates aqueous; S indicates saponaceous solution of the oil.

Process for Potash Soaps.

Process for preparing solid, non-hygroscopic potash soaps. R. Worms. German Patent 262,591. A small quantity of an unsaponifiable, liquid or semi-liquid substance, insoluble in water, especially a hydrocarbon, is incorporated with the soap; the addition may be made before, during, or after saponification.

Soap Manufacturing Process.

Soap and process for its manufacture. L. Derschow and F. Grasses, London. English Patent 18,723, August 15, 1912. Sawdust or finely divided wood (25 parts) is allowed to absorb 60 to 100 per cent. of its weight of petroleum or similar hydrocarbon solvent, and is then mixed, by kneading, with 100 parts of sodium soap.

¹³ Thesis Boon, 1906.

¹⁴ Deutsche Med. Wochen Schrift, 1907, No. 11; c. f. Thelen Thesis Rostock, 1907.

¹⁵ Pharm. post 40, 627.

¹⁶ Pharm. J. and Pharmacist, May, 1910, 844.

BOTH SIDES OF METHYL ALCOHOL QUESTION

Editor American Perfumer and Essential Oil Review:

Dear Sir: Because of my interest in the work for the prevention of blindness and death resulting from wood alcohol poisoning, my attention has been called to a letter in your January issue, written by Mr. Carleton Ellis. The attitude taken by Mr. Ellis is that rectified methyl alcohol is not poisonous, and he refers vaguely to tests that have been made by German scientists to prove his statements. He does not describe the tests, mention the scientists nor quote their conclusions. In view of these unauthenticated statements which have appeared in your columns, the following quotation from E. Merck's Report of Recent Advances in Pharmaceutical Chemistry and Therapeutics (1912) may be of interest:

"In the past year a large number of observers have studied the question of poisoning by methyl alcohol, its various symptoms, its cause, its transient and permanent injuriousness, its fatal termination, and the dangers of methyl alcohol in general. These include among others, Lewin, Rost, Levy, Strassmann, Foerster, Schenk, Ohlmann, Mendel, Hirschberg, Harnack, Grunow, Völtz, Kefstein, Kühn, Bürger, Pick, Schmiedeberg, Buckha, Rühle, Kroeber, Schlichting, Langgaard, Lennhoff, Stadelmann. For all details, reference should be made to the original communications of these authors, as they cannot be considered here. It may, however, be noted that they show that methyl alcohol itself, when habitually used, or when taken in a single large dose, may act as a poison, so that the toxicity is not due to the presence of impurities in the preparation. The fact that some persons are able to take comparatively large doses of methyl alcohol without apparent harm does not militate against the toxicity of methyl alcohol. It is impossible to say beforehand how large a dose will display an injurious action. According to Rühle, the lethal dose varies between 50 and 100 grammes, but the toxic dose is much less, and blindness may ensue after doses of only 7 to 8 grammes."

Exact references to the publications of these authorities may be secured from the above mentioned report.

Going still further, one may find a wealth of information upon the toxicity of methyl alcohol in a report published by Dr. Charles Baskerville following his wood alcohol investigation made for the New York State Factory Investigating Commission. Dr. Baskerville's standing as a chemist makes valuable his unqualified statement that wood alcohol is dangerous to life and sight, no matter how highly rectified. Other scientists in this country, including chemists and ophthalmologists, have written upon this subject and made the same positive statement—that wood alcohol was poison and in even small doses could cause blindness.*

Others have arrived at the same conclusions as a result of their practical experience in using methyl alcohol in their trades. The United States Brewers' Association has advised its members throughout the country to avoid the use of wood alcohol in preparing varnish to be used on the inside of vats; photo-engravers, paint and varnish dealers and dealers in barbers' supplies are among others who have discovered that the use of wood alcohol is unnecessary, and no matter how highly rectified, is dangerous.

The following quotation from the December issue of *Drugs, Oils and Paints* is interesting in this connection:

"Following the 'Safety First' idea, which has undoubtedly come to stay, we believe that where large quantities

of wood alcohol are used, placards pointing out the danger of carelessness in handling this product should be placed in conspicuous places.

"That wood alcohol is toxic in its effects every medical man knows, and therefore we believe that legislation is urgently needed to safeguard the public. So far as the varnish industry is concerned, denatured alcohol will eventually replace methyl alcohol in every case, except where celluloid is used."

Lest there be any doubt in the minds of your readers concerning the tragic results of wood alcohol poisoning, let them consider the following case of a young varnisher against a New York City brewery. This case, which has now reached the Court of Appeals, is a pathetic example of the deleterious effects of wood alcohol in the industries. This man, with his brother and two friends, all of them ignorant of the dangers of using wood alcohol varnish, went to work on one Monday morning at varnishing the inside of beer vats, none of them being protected by the artificial ventilators which are known to be necessary. By Saturday night the man in question was hopelessly blind for life, his two friends had died, while the brother was dangerously ill—all victims of the fumes of wood alcohol. A year previous to this tragedy, one man had been killed and another blinded in the same brewery and in the same way.

We find that rectified wood alcohol is used as a substitute for grain alcohol in the preparation of many cheap drinks, such as anisette, white brandy, cordials, etc., in the preparation of Jamaica ginger, paregoric, spirits of lavender, etc., with tragic results.

One case, for instance, is that of a woman who was permanently blinded by wood alcohol contained in paregoric which she bought at a reputable drug store in New York City, and another is that of a young man made sightless for life by the same poison which had been used to adulterate the whiskey which a sympathetic friend administered for a cold.

Within the last week two cases of blindness caused by swallowing wood alcohol—used, in one case, to adulterate anisette, and in the second, a cheap California wine—have been reported to this committee. The foreigners who unsuspectingly buy rectified wood alcohol for the home preparation of their cordials, believing it to be "good" alcohol, are particularly pathetic victims.

Only yesterday the New York papers published an account of the death of three young women who had died after drinking cordial at an Italian wedding, the cordial having been prepared at home after an old and much used formula. But, without knowing it, the bride's mother had bought and used wood alcohol instead of grain alcohol.

Since, as you say in your note, the truth will prevail, I am sure you will be glad to give space to this unimpassioned statement of a very few of the facts relating to wood alcohol and its dangers.

Very truly yours,

CAROLYN C. VAN BLARCOM,

Executive Secretary of the New York State Committee for the Prevention of Blindness.

New York, Feb. 26, 1914.

REPLY FROM MR. ELLIS.

Editor American Perfumer and Essential Oil Review:

As usual, when people of the scare-headline type attempt anything, it occurs with the blare of trumpets, and with little regard for the innocent ones who may suffer as a result of misapprehensions engendered.

The rather sensational stuff which lately has been put forth in regard to methyl alcohol mostly is decidedly of this character. Because this useful alcohol is reported to have caused some derangement in certain instances, we are asked to help wipe the commodity off the map. Let us see how this line of reasoning would result in general ap-

* "Death and Blindness from Methyl- or Wood-Alcohol Poisoning," by Casey A. Wood, M.D., Public Health Series Pamphlet, American Medical Association; "Wood Alcohol Blindness," by Hiram Woods, M.D., Jr., American Medical Association, June 7, 1913, Vol. LX, pp. 1762-1764; "On Occupational Diseases of the Eye," by Ward A. Holden, M.D., New York State Jr. of Medicine; "Methyl Amblyopia—Clinical Records and Historical Study," by Dr. E. Gruening, Archives of Ophthalmology, Vol. XXXIX, No. 4, 1910; "Amblyopia from Inhalation of Methyl Alcohol," by Dr. Henry H. Tyson, Archives of Ophthalmology, Vol. XLI, No. 5, 1912.

plication. Sickness or death have been reported because of children drinking kerosene, hence we should abolish kerosene. A little tubercular meat mayhap passes inspection, and possibly some one is thereby infected; hence we should abolish meat. Continuing, one may note that all foodstuffs nowadays are charged with containing preservatives, ptomaines, germs, decayed matter and what not; in consequence all food stuffs should be destroyed. The morning paper tells us that a man went to sleep in his motor boat, and was smothered by the fumes of gasolene leaking from the gasolene tank; this should deny us any right to use gasolene in our automobiles, and of course motor boats should be strictly prohibited—and so on and on.

And this is the situation in which methyl alcohol is now placed. All sorts of queer charges are laid to its door by those who seek to disparage a useful solvent. Methyl alcohol is not intended as a beverage. Although it has come to my knowledge that methyl alcohol has been drunk with impunity, and that certain people thoroughly familiar with this alcohol are willing to demonstrate its harmlessness by drinking it in moderate amounts, do not think that I am recommending the alcohol for internal consumption. Neither do I recommend ordinary ethyl alcohol for like use. Incidentally it may be noted that there are, of course, instances on record where strong ethyl alcohol has been imbibed with unfortunate results, aside from intoxication. Jaksch has stated that methyl alcohol is not poisonous, and that people in England and Ireland have used it as a beverage. The conclusion to be reached from the work of a number of investigators, according to Merck's Report, is that "methyl alcohol itself, when habitually used, or when taken in a single large dose, may act as a poison." A similar charge can be made against whisky.

When the matter is considered from the viewpoint of industrial use, I feel that the present attitude of the alarmists is unquestionably wrong. Even if a case of injury results now and then from sending men into improperly ventilated vats, tanks, etc., to do some varnishing, one should not hurriedly charge up the results to methyl alcohol. Gasolene or benzene in the varnish, carbon dioxide from fermentation, or simply lack of good air in such a "black hole of Calcutta," might well work like results. There is no vehicle quite the equal of pure air, and when using any material giving off vapors that modify the atmosphere, a slight measure of common sense should be employed and proper ventilation secured.

In a paper before the American Pharmaceutical Association Wallace makes the statement that

"Much ado has been made in relation to two cases of poisoning by inhalation by workmen varnishing vats. The facts are that the men were at work varnishing vats with shellac made from methyl alcohol. The vats were 20 feet wide and 10 feet deep, cylindrical in shape, and almost entirely closed, there being a vent of only 3 or 4 inches in diameter at the top. The workmen entered the vats through a manhole, which was partly closed. The temperature raised to about 70 degrees in order to dry the interior, and the exposure lasted several days.

"With these facts given I think a different light is thrown on the incident, and the blame should not be placed on methyl alcohol."

Wallace also states that he "secured a list of the plants in Pennsylvania, and found the number to be 37, then secured a list of physicians and druggists residing near these plants, and entered into correspondence with many of them, with the result that no cases of poisoning or blindness are reported, but, on the other hand, many cases are found of men who have been employed in these plants for a great period of time—some as long as 25 years—and their vision is still unimpaired."

At one time I was engaged in work where I was exposed a good deal to the vapors of methyl alcohol, and suffered no discomfort or disability. I have seen men work day after day in rooms laden with vapors of methyl alcohol arising from hot material containing it, and have never heard any complaint because of it.

Not long ago a pamphlet entitled "The Truth About Wood Alcohol" came to my attention, and I found this to be a protest by a large manufacturer of wood alcohol against the ill grounded attacks on the alcohol, supple-

mented by a considerable number of letters from prominent concerns handling or using the solvent, testifying to the freedom from any injury to workmen in their plants because of the presence of wood alcohol. While objection may be raised by some that the protest was colored by self interest, the confirmatory statements of so many reputable concerns with regard to the comparative harmlessness of wood alcohol is, to say the least, impressive.

The editor of the *Journal of Industrial and Engineering Chemistry* of the American Chemical Society in the September, 1913, issue takes a very fair attitude when stating that

"Our attention has recently been directed to attacks made upon methyl alcohol, the production and sale of which constitutes a legitimate chemical business involving the annual manufacture and use of about 10,000,000 gallons of that substance with a capital investment in this country of about \$12,000,000, an industry which employs over 3,000 working people. We find in current literature, read by the many, assertions made by undoubtedly honest, but overzealous and presumably misinformed persons, or persons not sufficiently informed of the facts to be competent to judge according to proportionality, such as the following: 'It is unsafe to burn wood alcohol or use it in any way in a room where the air is close. THE BOTTLE SHOULD NEVER BE UNCORKED UNLESS THE WINDOWS ARE WIDE OPEN.' Where would all the nearly 7,000 members of the American Chemical Society be if the latter were really true?

"Methyl alcohol is used extensively as a valuable solvent, and in the manufacture of many important materials. Its legitimate use should not be throttled."

Apart from the question of internal consumption the truth of the matter is that methyl alcohol is not in any class by itself as a worker of injury to the person. It stands along with benzene, gasolene, kerosene and other common solvents used in varnishes, etc., as unpleasant under abnormal conditions when it largely displaces the 21 per cent. of oxygen present in normal air, but under normal conditions it is quite harmless. Education should be directed not to any specific solvent, for that is neither fair to the solvent or to the user; rather we should endeavor to teach men not to crawl into tanks and impurify the air by solvents, as well as by their own respiration, and then expect to continue in good health. Instruction in general hygiene, instead of specific sensationalism is far more to the point.

Montclair, N. J., March 10, 1914. CARLETON ELLIS.

Essential Oil in Arctic Shrub.

Cassiope tetragona (L.) G. Don. A. Wichmann. Z. Allgem. österr. Apoth.-Ver., 1912, 50, 561—564.

After a full anatomical description of the Arctic shrub, *Cassiope tetragona*, the author gives the results of a brief chemical examination. Distillation with steam produced a small amount of an essential oil. The residue left was treated with a mixture of ether and alcohol, when 22.71 per cent. was extracted. Water subsequently removed 5.70 per cent. There was some evidence of the presence of a glucoside. Arbutin was proved to be absent.

Patent for Cooling Soaps.

Soaps; Cooling and solidification of — J. Morel. Fr. Pat. 446,898.

The soap is cooled and partially or completely solidified in closed chambers into which air is admitted by means of fans, pumps, etc., the rate of cooling being controlled at will by regulation of the supply of air.

A Valuable Influence in the Trade.

Editor American Perfumer and Essential Oil Review:

It is really a pleasure to spend the money for my subscription to 1915 where the investment gives so much real satisfaction. Your magazine is a valuable adjunct to anybody and everybody in the trade or affiliated with it. Good luck!

J. A. BARRY.

Boston, Mass., March, 1914.

FLAVORING EXTRACT SECTION

OFFICIAL REPORT OF FLAVORING EXTRACT MANUFACTURERS' ASSOCIATION.

Dr. Samuel H. Baer, vice-president of the Flavoring Extract Manufacturers' Association, in his report of the activities of the organization for March, tells of the recent hearing before the committee on Ways and Means at Washington of House Bill 12,303, introduced by Representative J. Charles Linthicum, of Maryland. This bill has for its object the exemption of flavoring extract manufacturers from the payment of the rectifiers' tax for reclaiming alcohol from the dregs of percolations of vanilla beans, etc. At present manufacturers are required to pay \$100 for a rectifier's permit. The text of the bill follows:

That section 3,246 of the Revised Statutes of the United States, as amended by section five of the act of March 1, 1879 (Twentieth Statutes, page 327), be, and the same is hereby amended by adding thereto the following:

"Nor shall any special tax be imposed upon manufacturing chemists or flavoring extract manufacturers for recovering tax-paid alcohol or spirituous liquors from dregs or marc of percolation or extraction, if said recovered alcohol or spirituous liquors be again used in the manufacture of flavoring extracts."

So that said section 3,246 of the Revised Statutes of the United States shall read as follows:

"Sec. 3,246. Nothing in this chapter shall be construed to impose a special tax upon vintners who sell wine of their own growth, or manufacturers who sell wine produced from grapes grown by others, at the place where the same is made or at the general business office of such vintner or manufacturer; *Provided*, That no vintner or manufacturer shall have more than one office for the sale of such wine that shall be exempt from special tax under this act; nor shall any special tax be imposed upon apothecaries as to wines or spirituous liquors which they use exclusively in the preparation or making up of medicines.

"Nor shall any special tax be imposed upon manufacturing chemists or flavoring extract manufacturers for recovering tax-paid alcohol or spirituous liquors from dregs or marc of percolation or extraction if said recovered alcohol or spirituous liquors be again used in the manufacture of flavoring extracts."

At the hearing arguments were made in favor of the bill by Representative Linthicum, and W. M. McCormick and Richard H. Bond, of McCormick & Co., Baltimore, fully explained the merits of the measure. It was pointed out that at present manufacturers of medicinal compounds are exempt and that flavoring extract manufacturers were equally entitled to the exemption. The result of the hearing apparently was favorable to the measure, which is one of the progressive steps now being taken by the association in the interests of its members.

It is understood that the bill has been referred to the Commissioner of Internal Revenue and it is confidently hoped he will give his approval to it. Meanwhile the members are urged to write to their Congressmen advocating its enactment.

Thomas E. Lannen, attorney for the association, has been active in issuing circular letters to the members upon this subject, and also has taken up House Bill 9,987, relating to shipments of food products, in which he has found many objectionable features.

As announced in our last issue the annual meeting of the association will be held in this city during the first week

in June. Members should arrange their affairs in advance to enable them to be present.

Drawbacks on Flavoring Extracts and Vanillin.

Treasury Decision 34,224 grants a drawback on flavoring extracts manufactured by the Joseph Burnett Co., Boston, Mass., with the use of domestic tax-paid alcohol.

Treasury Decision 34,326 grants a drawback on vanillin manufactured by the Verona Chemical Co., North Newark, N. J., with the use of imported cloves and acetic acid anhydride.

Treasury Decision 34,238 grants a drawback on flavoring extracts and medicinal preparations manufactured by the Davis & Lawrence Co., New York, with the use of imported alcohol and other imported materials. Referring to the extracts, vanilla beans, essential oils, coumarin and vanillin are mentioned in the order.

PURE FOOD AND DRUG NOTES.

In this section will be found all matters of interest contained in FEDERAL AND STATE official reports, etc., relating to perfumes, flavoring extracts, soaps, etc.

FEDERAL.

Notices of Judgment Given Under Pure Food and Drugs Act by the Secretary of Agriculture.

The first notices of Food Judgments issued under the new system in pamphlet form have been received. These items are of interest to our readers:

No. 2,769. Adulteration and misbranding of orange extract. Plea of guilty. Fined \$25. It had been labeled as pure extract but was found to be diluted.

No. 2,779. Adulteration and misbranding of lemon extract. Plea of guilty and fined \$5. It was labeled as "finest oil of lemon with alcohol colored with a little harmless color." Not a lemon extract, but was a product consisting of a highly dilute terpeneless extract without any oil of lemon and artificially colored with Naphthol Yellow S.

As a part of the service work of the Department of Agriculture in carrying out the new plan for operations under the Food and Drugs Law, announcement is made by the department officials of a plan adopted by the Secretary of Agriculture to give manufacturers prompt notice of withdrawal of food and drug cases. The plan adopted by the Secretary of Agriculture is intended to cover cases where the department decides not to prosecute a manufacturer after he has been cited and has appeared for alleged violation of the Food and Drugs Act, and to give such manufacturer, and to all parties interested prompt notice of such action by the department.

In a summarization of the new plan as adopted the department official says:

The proceeding in cases where the department suspects that a manufacturer is violating the Food and Drugs act is to take samples of his product in interstate commerce and cite the manufacturer to a hearing. This preliminary hearing is wholly ex parte and confidential in nature, and evidence gathered in this manner is regarded as privileged. No information as to the hearing is made public. Hereafter, however, in cases where, after a hearing, the department decided not to prosecute and places the matter in

permanent abeyance, no notice to that effect has been sent to the manufacturer. As a result, manufacturers whose cases were abated could not know where they stood in the matter until the Statutes of Limitations had run. This was equivalent to putting a flaw in their titles, and as a result such manufacturer would find difficulty in selling his business or borrowing money and was forced to do business under a cloud. Under the new plan the manufacturer will be immediately notified of the decision of the department not to prosecute on the basis of the particular sample taken in interstate shipment.

Placing a case in permanent abeyance, however, does not necessarily mean that the manufacturer's goods have been found to be absolutely pure or are in any way approved by the government. In many cases permanent abeyance results from the fact that there is a flaw in the evidence as to interstate shipment, that the intervening decision of the courts in other cases would make prosecution unsuccessful, that some amendment to the law adopted after taking the sample changed the legal aspect of the matter, or that it would be unprofitable to prosecute the case until the higher courts had ruled on parallel cases.

The abatement of the prosecution applies only to the particular article and the particular interstate shipment which was the basis of the hearing, and does not mean necessarily that the government will not take additional samples and undertake a new proceeding or inquiry. Notice will simply mean that the particular case is no longer hanging over the manufacturer's head. This will clear his record under the Food and Drugs Act in that particular case, but still leave him responsible under the Food and Drugs Act for his goods in the future.

Must Label Peroxide Under Insecticide Law.

The activity of the Federal authorities at Washington in enforcing the national insecticide law has brought out a ruling that hereafter peroxide of hydrogen must be labeled in accordance with the insecticide law rather than under the Food and Drugs Act of 1906.

NATIONAL FOOD CONFERENCE.

The first formal convention of the National Food Trades Conference was held in this city recently, when the movement, which has held two preliminary sessions, took tangible organized form. A name and by-laws were adopted, officers were elected and certain definite resolutions on pending food questions were adopted. The following officers were elected:

President—Louis Runkel (American Specialty Manufacturers' Association).

Vice-Presidents—H. W. Hoopes (National Confectioners' Association), Theodore F. Whitmarsh (National Wholesale Grocers' Association), W. M. McCormick (Flavoring Extract Manufacturers' Association), C. F. Mueller, Jr. (National Macaroni Manufacturers' Association).

Secretary—John A. Green (secretary of the National Retail Grocers' Association).

Executive Committee—The above and A. P. Husband (Millers' National Federation), Wm. B. Harris (National Coffee Roasters' Association), and one member yet to be chosen to represent the National Oyster Dealers' Association.

Committee on Collaboration with the Government—Charles Wesley Dunn (American Specialty Manufacturers' Association), Helen Louise Johnson (chairman Home Economics Department of the General Federation of Women's Clubs), and Mary Wood (chairman of the Legislative Committee of the New York State and New York City Federations of Women's Clubs).

The by-laws adopted provided for the name "The National Food Trades Conference," to comprise not more than five regularly accredited delegates from each of the national food trades, civic and other organizations in harmony with its purposes. The objects decreed that meetings be held at least annually, to consider subjects relating to food con-

trol laws and regulations and to aid in attaining purer and better foods, honestly labelled and advertised.

The object further provided that national, State and municipal food control officials, the Committee on Purity in Articles of Commerce and the Uniform State Laws Commission, with other civic and other organizations interested in food subjects, be invited to fully and freely participate. It was further specified that the conference does not assume to express the views of, or bind, its constituent members, except insofar as their own organizations authorize.

CIVIC FOOD LAW COMMISSION.

Seth Low, president of the National Civic Federation, has announced the appointment of a commission to study the workings of all pure food and drug laws, State and national. Vincent Astor is head of the commission. Other members are Dr. Carl L. Alsberg, chief of the Bureau of Chemistry; Health Commissioner Goldwater, of New York City; J. H. Wallis, president of the National Association of State Food and Dairy Commissioners; Miss Maude Wetmore, Mrs. S. R. Crockett, Samuel Gompers, John M. Stahl, of Chicago, and Edward N. Breitung, of Marquette, Mich.

The goal of the commission's work is different from what has been previously aimed at in pure food investigations. Dr. Alsberg thus explains it:

"There is one need in food control which is vastly more important than all others. It is the adequate sanitary and hygienic control of food. By that I mean the prevention of traffic in foods dangerous to health. To prevent this traffic is far more difficult than to prevent mere fraud in food products. Fraud may usually be detected by a chemical analysis."

PALM OIL BLEACHING.

F. FRITZ, *Seifensieder Zeit.* 1913, Vol. 40, p. 769.—The author employs, for the bleaching of palm oil, an apparatus previously used by Walton in 1860 for the oxidation of drying oils. This consists of a square compartment, three sides of which are open in order to afford access of light through large windows. Underneath there is a round kettle heated by steam, out of which the heated oil is pumped into a vessel, elevated to 6-7 metres and whose bottom is pierced with numerous fine holes, so that the oil continuously runs out in numerous fine streams into the above compartment. The upper vessel is further provided with an overflow. With this apparatus air, light and heat act simultaneously in the bleaching of the oil.

F. GOLDSMID AND H. DUBOVITZ, *Seifensieder Zeit.* 1913 40, pp. 687, 724, 740.—By bleaching palm oil for 30 hours with air at 60-70° C., the acid No. rose from 20.6 to 32.7, the free fatty acid content from 9.86 per cent. to 16.06 per cent., while the melting point decreased from 39.0 to 35.5° and the titer also decreased. An oxidation, therefore took place. G. proposes, instead of making use of the melting point, the solidification point be used, as a basis of judgment, and that the experiment be conducted with dry air. D. points out that the observed diminution of titer is brought about by the partly split off glycerine, after the removal of which the titer again becomes normal. The solidification point of the fatty acids is the same before and after the bleaching.

Standard for Curd Soap.

Curd Soap. F. Goldschmidt. *Seifensieder Ztg.*, 40, 741-4. A soap commission appointed by the soap manufacturers of Köln to determine what should constitute a curd soap has ruled that a curd soap must contain at least 60 per cent. of soap-forming fatty acids. It may or may not include rosin acids.

TRADE NOTES

Annual minstrel show of the employees of Procter & Gamble was held March 6, 7 and 9 in Mechanics' Hall, Cincinnati. There was a large attendance by the 3,000 or 4,000 employees. The interlocutor was Mr. Edward Anderson, superintendent of the works. Mr. Cecil Gamble and Mr. Allen took part, dancing the tango, with the former impersonating Mr. Allen's fair companion. Mr. Fowler, purchasing agent for the company, also took part.

Mr. Edwin G. Holloway, who recently was elected president of James S. Kirk & Co., soap manufacturers, Chicago, Ill., does not need any extended introduction to our readers who are engaged in that industry. Most of them know his face, have met him and are fully aware of his sterling qualities. Some of them, however, may not know that he has a biography of endeavor and progress, growing out of little or nothing that serves as an illustration of what a diligent, faithful and conscientious worker may achieve in business life. Mr. Holloway entered Chicago just



MR. E. G. HOLLOWAY.

twenty-three years ago and took a \$1.50 a day job in the Kirk factory, where he started as a packer of toilet soap. In six months he became head packer and in January, 1892, he was placed in the perfume department to help treat pomades and compound perfumery. Five months later he was transferred to the chemical laboratory as an assistant. At this time he went to night school and continued to make himself useful. In a year he became assistant chemist and two years later he was promoted to be chemist. Next he was made assistant superintendent and then superintendent. But why name all of the titles?

Mr. Holloway simply went through them all and became general manager. Since 1900 he has been a director and officer. In his new elevation he possesses the reward of thorough attention to his duties and his practical knowledge of so much of the detail in the great business concern cannot help but prove of the greatest value to him. His success shows what can be done by young men of application, intelligence, willingness and ambition. Why not show this to *your* bright young employees?

George Lueders & Co., New York, have established a branch office in Montreal at 396 St. Paul street.

Mr. F. E. Toennies, of Heine & Co., New York, came back from a western trip during the recent blizzard. He was snowed in near Utica, N. Y., on the Twentieth Century Limited, and escaped with nothing more serious than a severe cold, which has now left him. While in Chicago he called on the trade with Mr. D. A. Bennett, of Bennett & Davis, who are Chicago representatives of Heine & Co.

Mr. Kenneth C. Allen, managing director of Stafford Allen & Sons, Ltd., London, Eng., sailed for home from New York on board the *Mauretania* on March 17. He returned a few days previously from a Western trip with Mr. W. G. Ungerer. They met with bad weather, but good business, and Mr. Allen sailed on a typical spring day. On the night before his departure he gave a dinner to the officers and heads of departments of Ungerer & Co., American agents of the London house.



MR. KENNETH C. ALLEN.

The local papers of Grasse, France, raise up their voice in lamentation because of the continued rain. They have our sympathy, and we claim theirs, because of the siege of poor weather that we have recently gone through in this vicinity.

The Metal Package Company, Brooklyn, N. Y., is devoting a whole page in this issue to the announcement of a new style talcum powder can on which it has obtained a United States patent.

Mr. L. A. Van Dyk, manufacturer of synthetics, returned recently from a three weeks' trip through the middle west.

Mr. George A. Fox, manufacturer of extracts, Kansas City, Kan., has moved into his new plant at 405 North Sixth street, in that city.

The affairs of the Aroma Club are proceeding in very good order, and we take pleasure in reporting that the list of charter members now numbers more than one hundred. All those gentlemen connected with the perfume, soap, flavor, drug and confectionery industries who attend the luncheons of the club before April 1 will, at their option, be enrolled as charter members. Because of the coincidence with the opening of the convention of the Perfumers' Association, the meeting, scheduled for April 1, will be held on Tuesday, March 31.

Mr. Theo. Ricksecker, the New York perfumer, spoke briefly at the meeting of March 11. It is planned to have other speakers at every meeting in the future.

Carrying out this idea the members had the pleasure at the March 18 luncheon of listening to remarks by Mr. J. R. Young, manager of conventions for the Merchants' Association of New York City.

The engagement is announced of Miss Janet Salter Townsend, daughter of Mr. and Mrs. Wilmot Townsend, of Bay Ridge, Brooklyn, N. Y., to Mr. Julian Wilson Lyon, of Elizabeth, N. J.

Mr. Lyon is on the staff of Rockhill & Vietor, N. Y.

Mr. P. C. Magnus, of Magnus, Mabee & Reynard, Inc., is on the ticket for vice-president of the Georgia Society of New York City. The election occurs March 28.

Davis Supply Co., Rockland, Maine, will reorganize its premium business and will manufacture its own toilet preparations, spices, flavoring extracts, etc.

New York Drug and Chemical Club had no contest at its recent annual election. Mr. Christian Beilstein retired as vice-president. These officers were elected: President, Herbert B. Harding; vice-president, Evans McCarthy; secretary, Carlton G. Pate; treasurer, Alfred M. Best. Edward V. Killeen, of George Lueders & Co., was again elected chairman of the membership committee and of course Mr. Edwin H. Burr, American representative of Justin Dupont, Argenteuil, France, was continued as chairman of the house committee. The club's finances were reported to be in excellent condition.

Mr. Warren E. Burns, of the Compagnie Morana, New York, returned from a western trip recently.

We have just managed to get a few facts about a meeting of the Entertainment Committee of the Perfumers' Association that was held in Rochester last month. The delegation from New York consisted of Messrs. Goring, Calisher and Burns, who were met at the station in Rochester by Mr. Oscar B. Spiehler and Mr. Frank K. Woodworth, and at the Hotel Rochester they were joined by Mr. A. M. Spiehler, with the proprietor of the hotel, and the gentleman who presides over the Shrine of Bacchus.

The session began at 11 a. m. and we understand services were held frequently at the Shrine. Adjournment was taken at 4 p. m., and in the evening there was a banquet with Mr. A. M. Spiehler as host. The party journeyed to and from Rochester in a Pullman compartment, but we are unable to learn any of the details of the events en route.

Mr. Frank Tilford, of Park & Tilford, New York, has been appointed by Governor Glynn as a delegate from the State of New York to the Berlin Congress in connection with violations of the treaty of 1878, which guaranteed full rights of citizenship to all Jewish subjects.

Coming conventions: National Association of Retail Grocers, Louisville, Ky., May 18-21; National Association of Retail Druggists, Philadelphia, week of August 17; American Pharmaceutical Association, Detroit, Mich., week of August 24; National Wholesale Druggists' Association, Indianapolis, Ind., week of September 21, which is a change from the original date.

Sharp & Dohme, Baltimore, Md., has awarded a contract for the construction of a projected six-story addition to its laboratories in Pratt street, to cost \$60,000.

Mr. Albert Plaut, president of Lehn & Fink, returned to New York on the *Auguste Victoria* on March 7 from a two months' business trip to Europe.

Mr. Charles Gibson, president and treasurer of the wholesale drug house of Walker & Gibson, of Albany, N. Y., made a visit to the New York City trade early this month.

In the list of new incorporations will be found that of Benjamin French, Inc. This corporation has been established by Mr. Benjamin French, who was heretofore associated with J. Judd Mason & Co., 260 West Broadway, New York, as a director and treasurer of that company. The new corporation has taken over the agency of Descollonges Freres, Lyons, France, manufacturers of synthetics, and Milliot Freres, Paris, France, manufacturers of labels and gold seals.

Economy Soap Company, 17 Gregory avenue, Passaic, N. J., has increased its capital stock from \$25,000 to \$40,000 by the addition of \$15,000 preferred stock. Charles L. White, Jr., is president and John T. Van Riper is secretary.

American Druggists' Syndicate, New York, has been authorized to increase its capital stock from \$2,500,000 to \$10,000,000.

With its March issue the *Practical Druggist* moves to larger quarters in the Market and Fulton Bank Building, 81 Fulton street, New York. Prof. Otto Raubenheimer retires as editor-in-chief and the duties of editor will be performed by the publisher, Mr. Romaine Pierson.

We are indebted to Mr. Charles L. Huisking, broker in essential oils, etc., 5 Platt street, this city, for photographic views of shipping conditions at Messina and Catania, Italy, showing the method of placing consignments of oils and other products aboard steamships bound for this country.

Mr. D. P. Dougherty is back at his desk in the New York office of the National Aniline and Chemical Co., having recovered from a paralytic stroke, much to the gratification of his numerous friends in the trade.

Mr. A. Alexander, for the last fourteen years chemist with Alexander & Mendes, Inc., and their predecessors, is now connected with the Hepner Toilet Co., New York. This concern has made a specialty of toilet preparations, but will now put out a line of high grade extracts in attractive packages a little different from those already on the market.

Mr. J. Edward Young, Jr., a partner in Thurston & Braidich, vanilla beans and botanical drugs, returned to New York on February 26 from a trip to France which lasted two months. While abroad Mr. Young visited the principal vanilla bean centers of France, including Paris, Marseilles and Bordeaux. He returned aboard the *Lorraine*, of the French line.

Mr. David S. Brown, retired soap manufacturer, who died on June 22, 1913, left a net estate of \$209,270, according to a transfer tax appraisal filed recently with Edward W. Buckley, Deputy State Controller. The beneficiaries are David S. Brown and Arthur C. Brown, sons, each of whom receives \$101,706; Mary C. Brown, widow, who receives \$2,032; Mary T. Sutphen, daughter, who receives \$8,352, and the Weissert diamond badge, gavel and bronzes owned by her father. The assets include a trust deed executed by Mr. Brown in May, 1910, by which his

half interest in property in Twelfth avenue near Fifty-first street and certain mortgages were placed in the hands of trustees for him, the realty thus conveyed being appraised at \$175,905.

Miss Eleanor Mullins, toilet preparations, announces that the business has been moved to 74 Hanson place, Brooklyn, N. Y., where it will be continued.

The capital stock of the United States Talc Co. of New York has been reduced from \$100,000 to \$1,000.

Bubble from the *Oil, Paint and Color Trades Journal*: "The plea that soap is a 'necessity' should interest our soap trade readers. Those who object to the sale of this commodity on Sundays might urge that cleanliness is only 'next to' godliness, and not a substitute therefor."

The property of the Magic-Keller Soap Works, occupying the square bounded by St. Andrew, Howard, Josephine and Freret streets, New Orleans, La., has been purchased by M. Glaser, through William Pfaff, liquidating commissioner of the old soap plant. The property is assessed between \$42,000 and \$47,000. The purchase price, however, is said to be below that figure.

Globe Soap Co., of Cincinnati, declared the regular quarterly dividends of 1½ per cent. on the first, second and special preferred stocks, payable March 16. Books close March 2 and reopen March 17.

Progressive Dental Supply Company's bankruptcy case in New York City has resulted in Judge Hand, of the Federal Court, confirming a composition with the creditors at 15 cents on the dollar. The concern was located at 447 East Ninth street, New York.

Nashville Syrup Co., Nashville, Tenn., which used flavoring extracts in its business, has gone into bankruptcy, on petition of some of its creditors.

N. K. Fairbank Co., a New Jersey corporation, with \$4,000,000 capital stock, has obtained a permit to do business in Texas. The filing fee was \$4,040, and the franchise fee was \$135, both of which were paid. Its principal place of business will be Fort Worth.

This item from the Jacksonville (Fla.) *Times-Union*, never mind the plurals and singulars, will interest soap chemists and others, and details of the solution of the problem will be awaited with interest: "Another important industry for this section of the city is the Florida Water Soap Co., which plans to make its product famous in the State because of the fact that they seem to have discovered at last just what to put in their soap to render soft the hard artesian water that is common to this entire State. Speaking of this product, the manager of the plant says that experiments and demonstrations have convinced him and the company that they have really solved the problem for Florida, and that hereafter washing and bathing will be a real pleasure, instead of a dread."

Mr. J. A. Barry, of Boston, eastern representative of the Allen B. Wrisley Co., Chicago, made a business trip to New York City recently.

Dr. H. T. Mair and Mr. L. O. Smith, of Marshalltown, Iowa, have been contemplating moving their hair tonic and liquid soap plant to Mankato, Minn., provided citizens of the latter place would subscribe \$60,000 of the capitalization of a new company on a \$100,000 basis, the Iowa men to furnish the remaining \$40,000 for the enterprise. At last actions no action had been taken on the proposition.

This from Mr. Percy C. Magnus, Jr.:

A CALAMITY.

(News item: The peppermint crop is short this year.)

Oh, baby with your tummy ache,
You'll yell the whole night through.
No peppermint for you to take,
And dad will hike with you.

Oh, midnight sons, alack, alas,
Your chiefest joy has fled;
The julep you will have to pass,
And take straight stuff instead.

Oh, lady of the chewing gum,
No more your jaws will wag;
No wonder you are sad and glum,
No more the pep'mint jag.

And this from Mr. W. G. Ungerer:

CURSES.

The perfume maker went and failed,
He couldn't pay his rent;
"I'm in bad odor now," he wailed,
"For I've lost my last scent."

Mr. A. Dufour-Feronce, of E. Sachsse & Co., Leipzig, Germany, sailed for home on board of the steamship *Kaiserin Auguste Victoria*, of the Hamburg American line, on March 12. He returned to New York a few days previously from a two weeks' trip through the middle west in company with Mr. Ludwig Meyer, of Pfaltz & Bauer, Inc., American agents for the Leipzig house. The travelers reported having experienced fine weather, and the results were quite satisfactory.

Friends of Mr. M. R. MacLeod, formerly of W. J. Bush & Co., this city, but who now is in business in Calgary, Alberta, Canada, have sent to him a handsomely engrossed testimonial of confidence, bearing the following in artistic lettering, with a border of appropriate design:

"In recognition of the fact that M. R. MacLeod, for many years past, in the capacity as traveling representative for W. J. Bush & Co., one of the most prominent firms of manufacturing chemists, has been a frequent visitor at our respective places of business, and by his tactfulness, punctilious attention to our wants in every direction, and by his affable personality has endeared himself to us in an exceptional degree.

"We, the subscribed, desire to give expression to our sincere appreciation of the valuable services rendered us by 'Mac' (his familiar sobriquet) through suggestion, advice and action, and to the high esteem in which we hold him as a business man and friend, by presenting to him this testimonial as a visible token of our affection and of our heartfelt wishes for his future welfare and success. May

health, happiness and prosperity ever be the bestowal of a gracious fortune upon our business associate, counsellor and friend.

"A. D. Armstrong, Philadelphia, Pa.; Garrett E. Bacorn, president, the Bacorn Co.; J. H. Bell, treasurer, the C. F. Booth Co.; Charles F. Below, the Wm. Edwards Co.; N. E. Bettridge, president, the Toledo Biscuit Co.; William A. Bush, W. J. Bush & Co.; C. W. Costello, chairman, Weaver, Costello & Co.; William M. Hardie, president, the Wm. M. Hardie Co.; S. E. Heineman, president, the Merz Capsule Co.; G. J. Hurty, vice-president-treasurer, Hurty-Peck & Co.; W. H. Hyde, secretary-treasurer, the Abner Royce Co.; Thomas L. Keough, W. J. Bush & Co.; J. W. Knapp, president, the Knapp Extract Co.; Alvin Lehman, secretary-treasurer, the Lehman-Rosenfeld Co.; C. Blair Leighton, treasurer, W. J. Bush & Co.; G. L. Marsters, the Norwich Pharmacal Co.; Darius McLean, president, Darius McLean Co.; Willard Ohliger, second vice-president-superintendent Frederick Stearns & Co.; R. D. Palmer, president-treasurer, the Citizens' Wholesale Supply Co.; Frank B. Ross, president, Frank B. Ross Co.; Frank H. Schiffe, Peter Schiffe Co.; C. Schnabel, the Cincinnati Soap Co.; Frank G. Scott, president, Frank G. Scott, Inc.; Thomas H. Snyder, president, T. H. Snyder & Co.; C. H. Stuart, president, C. H. Stuart & Co.; Ralph S. Swinton, W. J. Bush & Co.; S. S. West, president, the Abner-Royce Co.; D. B. Whitney, vice-president, the Bacorn Co."

Oil Products Co., 17 Battery Place, has increased its capital stock to \$100,000, and has greatly enlarged its facilities in its factory in the Bush Terminal Building, on the Brooklyn side of New York harbor. The floor space now available covers more than an entire acre. In enlarging, the company has installed apparatus to manufacture U. S. P. zinc stearate, and its capacity at the start is 500 pounds a day, which will be increased. Development also will be made in the importation of Russian white mineral oils and other articles which enter into the manufacture of toilet specialties. Mr. Paul O. Hoerning, president of the company, is one of the live wires in optimistic endeavor to push along the growing wave of prosperous conditions.

Foreign trade opportunities are frequently offered through the Bureau of Domestic and Foreign Commerce, Washington, D. C., to which inquiries and correspondence should be addressed, mentioning the number of each. Following are recent announcements:

No. 12,616. Stoppers for sealing bottles.—An American consul in Great Britain has received a request from a local merchant for the names of firms manufacturing metal caps for sealing bottles. The firm furnishes a sample of the stopper desired, which may be obtained from the Bureau of Foreign and Domestic Commerce.

No. 12,667. Attar or roses.—A business man in Bulgaria desires to correspond with American firms interested in the importation of attar of roses. Correspondence may be in English.

No. 12,671. Tallow, lubricating oils, and similar products.—A business firm of Germany writes an American consular officer that it is desirous of obtaining business connections with firms in the United States dealing in tallow, oils (lubricating), and other products coming into

consideration for the soap industry. The firm states that it possesses extensive connections, a thorough organization for selling, and that it can dispose of large quantities of the articles mentioned. The firm will buy on its own account or act as agent; references will be furnished both in the United States and Germany. Any firm making a specialty for the soap or varnish industry and desiring to transact an export business is invited to get in touch with this concern.

No. 12,678. Barber supplies. An American consular officer in a European country reports that a business firm in his district is interested in barber supplies of all kinds and desires to correspond with American firms producing the same.

No. 12,558. Soap.—A leading firm in an Indian city has furnished an American consulate samples of floral-scented soaps from France, for which there is a good demand in India. It is stated that there would be opportunities for large trade if similar soap could be furnished at as low a price as \$3 per gross cakes, less 2½ per cent. discount, free Bombay. Correspondence with the firm in question may be in English. The samples of soap referred to may be obtained from the Bureau of Foreign and Domestic Commerce as soon as they are received.

NEW INCORPORATIONS.

B. J. Johnson Soap Co., Toronto, Ontario, has been incorporated with \$100,000 capital stock.

Lonte Chemical Co., New York City, capital stock \$25,000, has been incorporated by Siegbert Lewis, H. R. Tippenhauer and J. A. Chrystie, 309 West Ninety-third street.

David Laboratories, drugs and chemicals, capitalization \$100,000, has been incorporated in New York by E. H. Mayne, Henry Bruning and D. E. Ushkow, 212 Fifth avenue, New York City.

Othine Laboratories, Buffalo, N. Y., to manufacture toilet articles, capital \$3,000, has been incorporated by Otho H. White, Richard H. White and Elinor C. White.

Colt & Co., Montclair, N. J., to manufacture soaps, toilet preparations, etc., capitalization \$100,000, has been incorporated by G. W. Lawrence, W. D. Rennis and B. A. Dare, of Montclair.

American Syrup and Extract Co., Memphis, Tenn., to manufacture syrups and extracts, capitalized at \$100,000, has been incorporated by John H. Sullivan, Frank Baldwin and H. E. Carlloss.

Benjamin French, Inc., Manhattan Borough, New York City, essential oils and perfumers' supplies, capitalized at \$10,000, has been incorporated by Benjamin French, S. D. and R. H. Smith, New York.

H. J. Jaeger Co., Hoboken, N. J., laboratory research work, has been incorporated by H. J. and M. J. Jaeger, R. H. Hershman, all of Hoboken.

Fiedler Bros. Co., Methuen, Mass., manufacture soaps, insecticides, dyes, etc., capital \$1,400, has been incorporated by P. R. Fiedler, Margaret Connelly and I. E. Fiedler.

Ellis & Golterman, Inc., Great River, manufacture and deal in toilet articles, capital stock \$100,000, has been incorporated in New York State by J. B. Kilburn, F. L. Ellis, New York City; F. A. Huck, Bronx Borough.

The reader has not performed his duty to himself until he has carefully read the advertising pages as well as those which are devoted to news and other information.

NEW PRICE LISTS, PUBLICATIONS, ETC.

FRANZ FRITZSCHE & Co., Hamburg Germany (Rockhill & Victor, 114 John street, New York, American agents).—Current price list of essential oils, synthetic perfumes, terpeneless oils, etc., for soapmakers and perfumers, with a separate announcement of the Fritzsche jasmine, gold, silver and red "3 owls" labels. Another specialty is terpeneless "Varakom" eau de cologne oil.

TRADE NAMES, Part II, of the Seventh Edition of Trade Names of Perfumes and Toilet Articles, published by the Manufacturing Perfumers' Association.—This publication combines the supplements for 1909 to 1913 inclusive and will replace in the binder these five annual supplements, leaving in the binder only the Seventh Edition, published in 1908 and the Part II now issued. The chairman of the committee, A. D. Henderson, explains that the greatest care has been exercised to make Part II complete in every detail, but of course the accuracy cannot be guaranteed beyond that.

"DIE MEDIKAMENTÖSEN SEIFEN" is the title of a new book by Dr. Walther Schrauth, published by Julius Springer, Berlin, Germany. It deals with the manufacture and uses of medicated soaps, etc.

WYSS MFG. CO., INC., 418 Clay street, San Francisco, Cal., has published a new catalogue and price list, devoting attention to flavoring extracts, etc.

JARDEN LITHOGRAPHING CO., Philadelphia, Pa., sends us its 1914 calendar, issued in February, which is a fine specimen of the lithographing art in ten colors, and is well calculated to adorn any wall. "Queen Rose," of the rosebud garden of girls, is the attraction and her beauty shines from a golden frame. Two large sheets of perfumers' labels in colors, a specialty of the company, accompany the calendar, which will be sent on request.

ARABOL MFG. CO., 100 William street, New York, calls attention in a recent announcement to the advantages of its Tinnol for pasting labels on tin goods.

NATIONAL ASSOCIATION OF MANUFACTURERS, Foreign Trade Department, 30 Church street, New York, sends us the following bulletins: "Morocco, a New Field for American Trade and Investment," by Haim Toledano; "Balkan States and the Business Situation in the Far East," by Archibald J. Wolfe, the association's foreign trade expert.

SCHÜTZ & Co., Hamburg, send us a chart which shows the fluctuations of Japan-menthol and Pfeffermünzöl from the beginning of January, 1914, up to February 1, 1914. The chart will greatly interest dealers in these commodities. The same firm also sends us its market report on various commodities for February, 1914.

ANETHOL VS. OIL OF ANISE.

Mr. Otto Raubenheimer, in an elaborate paper printed in the *Journal of the American Pharmaceutical Association*, gives the following summary of the advantages of anethol over oil of anise:

1. It is of distinct chemical composition and can be obtained practically 100 per cent. pure, while the different anise oils vary greatly in their anethol content.
2. It is always of uniform character and is the same in every case, while anise oils differ greatly, physically and chemically, according to their origin.
3. Anethol can be tested more readily and more stringently as to its quality, purity and strength.

4. It is of greater solubility, being soluble in two volumes of alcohol, while some oils of anise require five to six volumes.

5. Anethol possesses a sweeter taste and a more aromatic odor than even the very best oil of anise.

6. Anethol is also to be preferred from a therapeutic point, as it constitutes that portion of oil of anise which is the most valuable medicinally.

7. Last, but not least, its price is reasonable in proportion to its strength, and some manufacturers claim it is twice as strong as the oil. The same price list quotes the Chinese oil at \$1.40, the Russian at \$2, and anethol at \$2.40.

As this question of anethol vs. oil of anise has arisen in connection with its use in liquor ammonii anisatus, Mr. Raubenheimer also states the formula of the latter which has been proposed for the National Formulary IV under the title of

SPIRITUS AMMONII ANISATUS.

Anisated Spirit of Ammonia.

Anethol	30 Cc.
Alcohol	820 Cc.
Ammonia water	150 Cc.

To make 1000 Cc.

The advantages of Anethol in Spiritus Ammonii Anisatus, according to his experience, and he has prepared this galenical in large quantities for a great many years, are as follows:

1. Anethol produces a clear solution, while some of the anise oils give a turbid or cloudy spirit, which forms a precipitate.

2. Anethol produces a colorless preparation, while most of the anise oils turn the spirit yellow.

PATCHOULI OIL.

According to a German contemporary the European distilled patchouli oil has, during the last few months, undergone a considerable alteration in its character. Up till quite recently this oil had a specific gravity well above 0.970, an optical rotation of at least — 60°, and was completely soluble in a volume of 90 per cent. alcohol. During the past few months, oils which have been distilled in Hamburg from Penang patchouli leaves, free from any other leaves, have been found to have a specific gravity of 0.950 to 0.960, an optical rotation of from — 42° to — 59°, and required up to six or even more volumes of 90 per cent. alcohol to effect a clear solution. Two particular abnormal samples were found to have the following characters:

	(1)	(2)
Specific gravity	0.935	0.937
Optical rotation	— 90	— 340
Refractive index	1.505	1.507
Saponification value	4.5	6.5
Do. (after acetylation)	38	42
Solubility in 90 p. c. alcohol	1 in 4	1 in 5

Valuable Asset for Salesmen.

Editor American Perfumer and Essential Oil Review:

We have always been enthusiastic friends of the AMERICAN PERFUMER, and we consider it a most valuable asset to all of our salesmen to thoroughly read it, and keep abreast with what is going on in the perfumery world.

THE C. B. WOODWORTH SONS CO.

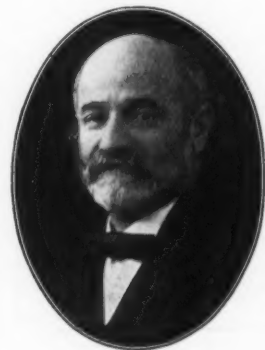
Rochester, N. Y., March 4.

IN MEMORIAM FOR DEPARTED FRIENDS.

- BAUMEISTER, MAX, soaps, St. Louis, March, 1913.
 BRUCKER, CARL, senior resident member of Fritzsche Brothers, New York, March, 1913.
 DOHME, WILLIAM F., Baltimore, March, 1913.
 FOX, HENRY C., of H. C. Fox & Sons, glass bottles, Philadelphia, 1910.
 GREEN, CHARLES H., in charge of perfumery and soaps for H. K. Wampole & Co., Perth, Ont., March, 1906.
 GUILD, FREDERIC A., in charge of making toilet preparations and perfumes, Colgate & Co., March, 1909.
 HAZELHURST, MAJOR CHARLES WHITEWAY, soaps, England, March, 1912.
 KIRK, JAMES A., president of J. S. Kirk & Co., soaps, Chicago, Ill., March, 1907.
 LAMBERT, SAMUEL H., essential oils, London, March, 1913.
 LAYMAN, CHARLES NOEL, of Wright, Layman & Umney, essential oils, London, England, March, 1910.
 LYON, DR. ISRAEL, toilet supplies, Englewood, N. J., March, 1907.
 OLCOTT, GEORGE N., son of George M. Olcott, Dodge & Olcott Co., New York, March, 1912.
 POOLE, THOMAS E., soaps, Denver, Mich., March, 1913.
 RIKER, WILLIAM B., perfumery, New York, March, 1906.
 SHEDD, FREEMAN B., Lowell, Mass., cologne, March, 1913.
 WILLIAMS, JAMES BAKER, founder of J. B. Williams & Co., Glastonbury, Conn., March, 1907.
 WOODLEY, GEORGE F., JR., Woodley Soap Manufacturing Co., Boston, Mass., March, 1912.

Joseph Fels, of Philadelphia.

Joseph Fels died of pneumonia on February 22 at 3640 Chestnut street, Philadelphia, Pa., after only a few days of illness. He was born at Halifax, Va., December 16, 1853, and was educated at Yanceyville, N. C., Richmond, Va., and Baltimore, Md., leaving school at 16 years of age. He began his business life as a traveling salesman in Baltimore and joined his father in the manufacture of soap in Philadelphia in 1876. The firm was later joined by his brother, Samuel S. Fels. After the death of the father, the two brothers continued and extended their business, resulting in



JOSEPH FELS.

a manufacturing plan on an extensive scale in which the workers shared profits in proportion to wages paid.

In 1901, Joseph Fels went to England on the business of the firm, and soon after began to interest himself in living conditions there as he had done at home, such as the cultivation of vacant lands and bettering of conditions of the unemployed.

In 1905 his interest in land questions broadened into a conviction of the prime necessity of freeing the land for the benefit of the whole community as against the holding of it by comparatively a few. He espoused the cause of

the Single Tax movement pioneered by the late Henry George, and to it devoted his whole enthusiasm and energy, sparing neither time, labor, talents nor money in its furtherance. In order to disseminate the propaganda of Single Tax, he established the "Joseph Fels Fund of America," endowing it with \$25,000 per annum for five years. In the last eight or ten years he became so much absorbed in this public work that little of his attention was given to business, although he remained to the last a member of Fels & Co.

Obituary Notes.

Oscar Heller, for more than twenty years editor and publisher of the *Seifenfabrikant*, Berlin, and secretary of the Soap Manufacturers' Association of Germany, died on January 16 at the age of 60 years. Mr. Heller originally was chemist for a large concern in Charlottenburg, Germany, where he established and conducted a laboratory in which valuable research work was done for the benefit of the soap industry. He was recognized as an expert in soap chemistry and often was called as a witness in law suits.

Francis F. Stuart, of Stuart Bros., makers of flavoring extracts, etc., Niagara Falls, Ont., died, at his home, 391 Palmerston avenue, Toronto, on March 17, of acute Bright's disease. He was born in Aberdeen, Scotland, 68 years ago, and came to Canada, establishing himself first in Montreal, a number of years ago.

David Pringle, of Maxim, Pringle & Brush, dealers in soaps and perfumery, 163 William street, New York, died February 23, at his home, 145 Greene avenue, Brooklyn N. Y. He was in his sixty-fourth year and is survived by his widow and daughter.

John H. Poole, Denver, Col., is dead, aged 65. With his two brothers he established the first soap factory in Denver in 1870. He became prominent in public affairs and served in the Colorado Senate. He was unmarried.

Mrs. P. M. Watkins, wife of the head of the Watkins Extract Company, San Francisco, Cal., died in February. Mr. Watkins' numerous friends will sympathize with him.

Aromatics Used for Ancient Embalming.

Reuter has recently published a book entitled "De l'embaumement avant et après Jésus Christ," in which he gives a number of most interesting facts as to the substances used and the method by which the embalming processes were carried out. Amongst others, he has examined the mummy of Hekan-M-Saf, a commander in the Egyptian navy in the time of the thirtieth dynasty. He was able to demonstrate the presence of storax, mastic, Aleppo resin, and asphaltum; and Chian turpentine and cedar wood resin were probably present. An embalmed ibis now in the Neuchâtel museum was also examined, and there were found present storax, asphaltum, and a tar containing benzene and phenol. There was also present a resin which yielded an essential oil on distillation, from which colorless crystals, melting at 96°, separated. An old urn was examined and found to contain a resin indistinguishable from gurgun resin. The embalming resin collected from the sarcophagus of a priest of the necropolis of Carthage was found to contain mastic, storax, and Aleppo resin, and probably sandarac and asphaltum. The resin was perfumed, and on distillation yielded an essential oil containing thymol. Another resin from a sarcophagus of Carthage was found to contain the same constituents, together with some incense. In this specimen thymol was also discovered.

PATENTS AND TRADE MARKS.

	WHITE FROST 47696		HEALA-DERMA 58501		ANTI-AGE LINE 59350		59869		59983		60673
	45351		62538		63236		64254		64450		67407
	45346		71383		68498		70113		70678		73943
	1090091		71433		72903		73123		73151		73503
	1089717		45375		73004		73502		74380		74282
	74621		74464		74503		74913		75017		74626
	75046		70900		74767		75257		75497		75540
	75112		74657		75541		75114				
			75643								
											

NOTE TO READERS.

This department is conducted under the general supervision of a very competent patent and trade mark attorney. This report of patents, trade marks, labels and designs is compiled from the official records of the Patent Office in Washington, D. C. We include everything relating to the four co-ordinate branches of the essential oil industry, viz.: Perfumes, Soap, Flavoring Extracts and Toilet Preparations.

The trade marks shown above are described under the heading "Trade Marks Applied For," and are those for which registration has been *allowed*, but not yet *issued*. All inquiries relating to patents, trade marks, labels, copyrights, etc., should be addressed to

PATENT AND TRADE MARK DEPT.
Perfumer Pub. Co. 80 Maiden Lane, New York.

DESIGNS GRANTED.

45,346.—BOTTLE. John F. Meyer, New York, N. Y. Filed January 12, 1914. Serial No. 811,769. Term of patent 14 years.

The ornamental design for a bottle, as shown.

45,351.—BOTTLE. Albert E. Pickard, Roslyn, N. Y. Filed December 12, 1913. Serial No. 806,348. Term of patent 14 years.

The ornamental design for a bottle as shown and described.

45,375.—BOTTLE. John L. Dunnock, Baltimore, Md. Filed December 30, 1913. Serial No. 809,584. Term of patent 7 years.

The ornamental design for a bottle, as shown.

PATENTS GRANTED.

1,089,383.—PROCESS OF DISTILLING GLYCERIN. Frank J. Wood, New York, N. Y., assignor to Marx and Rawolle, New York, N. Y., a Corporation of New York. Filed January 15, 1910. Serial No. 538,306. (Cl. 87—4.)

5. The process of effecting a series of distillations of glycerin or similar material, consisting of conducting a body of glycerin successively to a plurality of stills arranged in alternate series with their respective condensers, and combining with the glycerin at each of the succeeding stills the steam out of which the glycerin vapors of a previous distillation have been condensed in one of said condensers.

1,089,717.—BOTTLE-STOPPER AND APPLICATOR. Herman A. Metz, New York, N. Y. Filed August 5, 1911. Serial No. 642,559. (Cl. 215—51.)

A bottle stopper comprising a top portion, a flange, a shank carried thereby having at its lower end an enlarged member, an absorbent material surrounding said enlarged member of the shank, and an elastic bushing surrounding the shank and portions of the absorbent material.

1,090,091.—BOTTLE-CLOSURE. Anst Alexander and Arnold M. Steinberg, Paris, Tenn. Filed June 25, 1913. Serial No. 775,716. (Cl. 215—58.)

A bottle having its neck provided intermediate of its ends with a continuous annular channel, a member embracing the neck and having a portion upstruck in the channel, said member having its crown overlying the neck, a gasket interposed between the neck and the crown, a threaded neck rising from the neck having a discharge passage, a valve carried by the cap and extending into the discharge passage and closing the same when the cap is adjusted in one position, an inwardly extending annular projection on the cap cooperating with the upstruck portion to prevent complete disengagement of the cap from the attaching member, an annular bead formed on the neck of the bottle adjacent to the lower end of said cap and adapted to be engaged by the latter in the closing thereof to form an air-tight connection between the cap and bottle.

LABELS REGISTERED.

17,572.—Title: "Our Own American Family Soap Powder." (For Soap Powder.)—James S. Kirk & Company, Chicago, Ill. Filed December 18, 1913.

17,573.—Title: "Kirk's Flake Soap Powder." (For Soap Powder.)—James S. Kirk & Company, Chicago, Ill. Filed December 18, 1913.

17,574.—Title: "Our Own American Family Soap Powder." (For Soap Powder.)—James S. Kirk & Company, Chicago, Ill. Filed February 7, 1914.

17,575.—Title: "Kirk's Flake Soap Powder." (For Soap Powder.)—James S. Kirk & Company, Chicago, Ill. Filed February 7, 1914.

PRINTS REGISTERED.

3,506.—Title: "Maxam The New Hair Tonic." (For Hair-Tonic.)—Claffin, Scott & Hill, Chicago, Ill. Filed January 22, 1912.

3,509.—Title: "Packer's Tar Soap." (For Tar Soap.)—Edward A. Olds, New York, N. Y. Filed February 6, 1914.

TRADE MARKS REGISTERED.

95,413.—Toilet Powder, Complexion-Cream, Perfumes, and Tooth-Paste.—Doster-Northington Drug Co., Birmingham, Ala.

Filed August 9, 1913. Serial No. 72,246. Published December 16, 1913.

95,418.—Liquid Toilet Preparation to Improve and Preserve the Complexion.—The Fountain Chemical Company, Baltimore, Md.

Filed July 8, 1912. Serial No. 64,617. Published August 5, 1913.

95,425.—Certain Named Toilet and Chemical Preparations.—Goodrich Drug Co., Omaha, Neb.

Filed May 1, 1912. Serial No. 63,238. Published June 3, 1913.

95,430.—Perfume, Toilet Water, Sachet, Face-Cream, Face-Powder, and Cold-Cream.—Richard Hudnut, New York, N. Y.

Filed November 10, 1913. Serial No. 73,888. Published December 16, 1913.

95,438.—Cotton-Seed Oil.—Kentucky Refining Co., Louisville, Ky.

Filed February 9, 1910. Serial No. 47,690. Published December 9, 1913.

95,439.—Preparation Used as Mouth-Wash and Treatment of Rigg's Disease.—King & Oliphant, Macon, Ga.

Filed November 7, 1913. Serial No. 73,851. Published December 16, 1913.

95,445.—Remedy for Dandruff, Itching, and Scalp Eczema.—Mary E. Leive, Fort Wayne, Ind.

Filed October 15, 1913. Serial No. 73,383. Published December 16, 1913.

95,460.—Hair-Tonic and Liniment for External Use.—John Tilden Moulton Co., Augusta, Me.

Filed July 16, 1913. Serial No. 71,806. Published December 16, 1913.

95,481.—Lemon Extract for Foods.—Thomas M. Sayman, St. Louis, Mo.

Filed April 12, 1913. Serial No. 69,746. Published December 16, 1913.

95,482.—Vanilla Extract for Foods.—Thomas M. Sayman, St. Louis, Mo.

Filed April 12, 1913. Serial No. 69,748. Published December 16, 1913.

95,490.—Alkaline Antiseptic for External and Internal Applications and as a Mouth-Wash.—Steinicke and Apicella, Long Island City, N. Y.

Filed November 7, 1913. Serial No. 73,848. Published December 16, 1913.

95,514.—Straightening-Oil, Temple-Restorer, and Hair-Grower.—Sallie Booker, North Birmingham, Ala.

Filed October 7, 1913. Serial No. 73,250. Published December 23, 1913.

95,551.—Rouge, Face, and Toilet Powders.—Maurice Monin, Paris, France.

Filed September 3, 1913. Serial No. 72,665. Published December 23, 1913.

95,553.—Hair-Tonic and Skin-Creams.—Henry A. Moore, Cambridge, Mass.

Filed March 24, 1913. Serial No. 69,298. Published December 23, 1913.

95,557.—Medicated Powder or Tablet for the Feet.—Ped-Ami Co., Inc., New York, N. Y.

Filed October 9, 1913. Serial No. 73,296. Published December 23, 1913.

95,573.—Olive-Oil.—Achille Starace, New York, N. Y.

Filed July 15, 1913. Serial No. 71,718. Published December 9, 1913.

95,582.—Perfumery and Face-Tints.—E. Wertheimer et Cie., Paris, France.

Filed May 24, 1912. Serial No. 63,763. Published December 23, 1913.

95,623.—Soaps.—J. L. Hopkins & Co., New York, N. Y.

Filed July 15, 1913. Serial No. 71,712. Published December 16, 1913.

95,638.—Soap.—Lautz Bros. & Co., Buffalo, N. Y.

Filed November 29, 1913. Serial No. 46,163. Published December 16, 1913.

95,652.—Powder Preparation for Cleaning White Shoes.—O-White-O Cleaner Company, Akron, Ohio.

Filed July 29, 1913. Serial No. 72,030. Published December 16, 1913.

95,683.—Cooking-Oil.—Union Lard Corporation, New York, N. Y.

Filed September 9, 1913. Serial No. 72,753. Published December 30, 1913.

95,706.—Preparation for the Growth and Preservation of the Hair.—William J. Deegan, Chicago, Ill.

Filed September 17, 1913. Serial No. 72,915. Published December 30, 1913.

95,710.—Dental Cream.—Harry S. Goldstein, Philadelphia, Pa.

Filed October 22, 1913. Serial No. 73,548. Published December 30, 1913.

95,716.—Hair-Restorer.—Julia Pavelkovitz, Chico, Cal.

Filed October 16, 1913. Serial No. 73,423. Published December 30, 1913.

95,729.—Hair-Tonics and Hair Dressings.—J. C. Ayer Company, Lowell, Mass.

Filed July 16, 1912. Serial No. 64,753. Published April 29, 1913.

95,730.—Foot Salves and Powders.—Backes & Ferguson, Stockton, Cal.

Filed September 29, 1913. Serial No. 73,096. Published January 6, 1914.

95,746.—Soap.—Claire Manufacturing Co., Chicago, Ill.

Filed November 17, 1913. Serial No. 74,027. Published January 6, 1914.

95,747.—Soaps and Soap Powders. Colgate & Co., New York, N. Y.

Filed October 10, 1913. Serial No. 73,299. Published January 6, 1914.

95,757.—Soap, Soap Powder, and Washing-Powder.—The Globe Soap Company, Cincinnati, Ohio.

Filed May 21, 1910. Serial No. 49,844. Published January 6, 1914.

95,758.—Soap, Soap Powder, and Washing-Powder.—The Globe Soap Company, Cincinnati, Ohio.

Filed May 21, 1910. Serial No. 49,845. Published January 6, 1914.

95,772.—Cleaning and Whitening and Color Restoring Preparations for Shoes, Gloves, etc.—Frank J. LeDoyen, Baltimore, Md. Published March 10, 1914.

95,777.—Face-Cream.—National Pharmacy Co., Oakland, Cal.

Filed November 19, 1912. Serial No. 67,000. Published January 6, 1914.

95,800.—Perfumery.—Tokalon, Incorporated, New York, N. Y.

Filed December 3, 1913. Serial No. 74,340. Published January 6, 1914.

95,801.—Perfumery.—Tokalon, Incorporated, New York, N. Y.

Filed December 3, 1913. Serial No. 74,341. Published January 6, 1914.

95,802.—Perfumery.—Tokalon, Incorporated, New York, N. Y.

Filed December 3, 1913. Serial No. 74,343. Published January 6, 1914.

95,803.—Perfumery.—Tokalon, Incorporated, New York, N. Y.

Filed December 3, 1913. Serial No. 74,344. Published January 6, 1914.

95,804.—Perfumery.—Tokalon, Incorporated, New York, N. Y.

Filed December 3, 1913. Serial No. 74,346. Published January 6, 1914.

95,813.—Toilet Cream and Toilet Lotion.—Max Wolodarsky, New York, N. Y.

Filed October 20, 1913. Serial No. 73,525. Published January 6, 1914.

TRADE MARK REGISTRATIONS APPLIED FOR.

47,696.—Kentucky Refining Co., Louisville, Ky. (Filed February 9, 1910. Published February 17, 1914. Claims use since about December, 1907.)—Cotton-Seed Oil.

58,501.—A. B. Seelye Med. Co., Abilene, Kansas. (Filed September 1, 1911. Published March 3, 1914. Claims use since September 1, 1910.)—Toilet soap.

59,350.—Abbie M. Emery, Denver, Colo. (Filed October 26, 1911. Published March 3, 1914. Claims use since October 21, 1911.)—A facial enamel.

59,869.—Aubry Sisters, New York, N. Y. (Filed November 23, 1911. Published February 24, 1914. Claims use since April, 1907.)—Soap.

59,983.—Annie Young, Amsterdam, N. Y. (Filed November 28, 1911. Published March 3, 1914. Claims use since 1900.)—A remedy for tan, sunburn, chapped hands, etc.

60,673.—The J. K. Armsby Co., Chicago, Ill. (Filed January 8, 1912. Published March 3, 1914. Claims use since September 2, 1911.)—Olive oil, etc.

62,538.—Mandel Brothers, Chicago, Ill. (Filed March 30, 1912. Published February 24, 1914. Claims use since January 2, 1912.)—Perfumes, toilet waters, face powders, rouges and sachet powders.

63,236.—Goodrich Drug Co., Omaha, Neb. (Filed May 1, 1912. Published February 17, 1914. Claims use since September 1, 1904.)—Rouge, nail tint and enamel, nail powder, etc.

64,254.—Olo Voil Mfg. Co., Kansas City, Mo. (Filed June 18, 1912. Published March 10, 1914. Claims use since March 12, 1912.)—Hair tonic.

64,450.—Vaughn-Crutchfield Co., Winston-Salem, N. C. (Filed June 27, 1912. Published February 24, 1914. Claims use since May, 1905.)—Flavoring extracts for foods.

67,383.—The N. K. Fairbank Co., Chicago, Ill. (Filed December 13, 1912. Published February 17, 1914. Claims use since about October, 1901.)—Washing powder.

67,407.—Annie MacKinstry, New York, N. Y. (Filed December 14, 1912. Published February 17, 1914. Claims use since January 1, 1912.)—Preparations for hair dyes.

68,489.—D. J. Faour & Bros., New York, N. Y. (Filed February 11, 1913. Published March 10, 1914. Claims use since January 2, 1900. The picture being that of Joseph Bey Karam, a deceased Syrian portrait.)—Soaps.

70,113.—Frazier & Bachmann, Knowlton, Pa. (Filed April 29, 1913. Published March 3, 1914. Claims use since February, 1913. The picture shown in the drawing is fanciful.)—Polishing powder for glass and metals.

70,678.—Otto W. Tanke, Chicago, Ill. (Filed May 26, 1913. Published February 17, 1914. Claims use since March 18, 1913.)—A detergent in powder form.

70,900.—Kansas City Wholesale Grocery Co., Kansas City Mo. (Filed June 6, 1913. Published March 10, 1914. Claims use since July, 1902.)—Olive oil, etc.

70,956.—Gallet, Pellerin et Cie., Paris, France. (Filed June 7, 1913. Published March 3, 1914. Claims use since the second day of January, 1891.)—Pastes and powders for beautifying and preserving the teeth, skin, and hair, and perfumery.

70,991.—Dr. J. A. Walsh Co., Boston, Mass. (Filed June 9, 1913. Published February 24, 1914. Claims use since May 28, 1913. The portrait is fanciful, no claim being made to the words "It Protects.")—Tooth powder and tooth paste.

71,311.—Lofaro & Rossi, Utica, N. Y. (Filed June 23, 1913. Published February 17, 1914. Claims use since March 14, 1913. No claim being made to the word "Oil.")—Olive oil.

71,433.—Arbuckle Brothers, New York, N. Y. (Filed June 30, 1913. Published March 3, 1914. Claims use since February 18, 1913.)—Flavoring extracts, etc.

72,903.—The Styron-Beggs Co., Newark, Ohio. (Filed September 16, 1913. Published March 10, 1914. Claims use since January, 1896. No claim being made to the exclusive use of the words "Dealers Authorized to Guarantee These Goods" and "See That Spot.")—Oil cassia cinnamon, oil peppermint, rubbed sage, flavoring extracts, fruit color, oil lemon, extract wintergreen, synthetic oil wintergreen, and oil cloves, all for flavoring foods.

73,004.—Angelo Di C. Davini, Lucca, Italy. (Filed September 23, 1913. Published March 10, 1914. Claims use since February 1, 1913. No claim being made herein to any of the printed matter, with the exception of the words "La Formica.")—Olive oil.

73,123.—A. Biette & Fils, Nantes, France. (Filed September 30, 1913. Published February 17, 1914. Claims use since July 1, 1897. No claim is made for the words "Savonnerie Moderne" and the word "Savon.")—Soap.

73,151.—James McGinty, Chicago, Ill. (Filed October 1, 1913. Published February 24, 1914. Claims use since February 19, 1913.)—Perfumes, face powder and face cream.

73,194.—The Benfer Mfg. Co., Cleveland, Ohio. (Filed October 3, 1913. Published February 17, 1914. Claims use since the latter part of July, 1913.)—Cleaning compounds.

73,327.—Edward Burnham, Chicago, Ill. (Filed October 13, 1913. Published February 17, 1914. Claims use since about May, 1908.)—Perfumes, toilet water, complexion powder, preparations for the treatment of the skin, face creams, face lotion, blackhead and pimple lotion, shampoo powder, hair tonic, depilatories, and manicure enamel.

73,502.—E. E. Dickinson, Essex, Conn. (Filed October 20, 1913. Published February 17, 1914. Claims use since August 1, 1913.)—Witch hazel.

73,503.—Phil. Eisemann, Lancaster, Pa. (Filed Oct. 20, 1913. Published February 17, 1914. Claims use since September 29, 1913 on head tonic, shampoo liquor, head rub, bay rum, and toilet creams; in the case of toilet water since January 16, 1911, and in the case of face lotion since

October, 1911.)—Head tonic, shampoo liquor, head rub, bay rum, toilet water, toilet creams, and face lotion.

73,943.—Frank Gaius Burke, New York, N. Y. (Filed November 13, 1913. Published February 17, 1914. Claims use since the year 1907. No claim being made to the words "Jabon Para El Cutis Contenoendo Benjui y Cold Cream, Jabon Para Et Tocador," "Trade Mark," and "Manhattan Soap Co., New York"; furthermore no claim being made to the representation of the unfolded wrapper or package in which the goods are sold.)—Toilet soaps.

74,282.—Dunlap & Co., Detroit, Mich. (Filed Dec. 1, 1913. Published March 10, 1914. Claims use since November 1, 1910.)—A disinfectant, etc.

74,380.—Maurice Monin, Paris, France. Filed December 5, 1913. Published February 24, 1914. Claims use since December, 1908. The word "Brunette," the exclusive use of the word "Rouge" not being claimed.)—Rouge.

74,381.—Maurice Monin, Paris, France. (Filed December 5, 1913. Published February 24, 1914. Claims use since April, 1913. The word "Framboise," the exclusive use of the word "Rouge" not being claimed.)—Rouge.

74,464.—Hopfinger & Roth, St. Louis, Mo. (Filed December 9, 1913. Published March 10, 1914. Claims use since November 29, 1913.)—Soap.

74,503.—The J. K. Armsby Co., San Francisco, Cal. (Filed December 11, 1913. Published March 3, 1914. Claims use since April, 1911.)—Olive oil, etc.

74,540.—The Adiposa Co., Chicago, Ill. (Filed December 12, 1913. Published March 3, 1914. Claims use since November 15, 1913.)—Massage cream.

74,616.—The Martheo Chem. Co., Columbus, Ohio. (Filed December 15, 1913. Published March 10, 1914. Claims use since about November 15, 1913.)—Soap in paste form.

74,621.—Mary Sullivan, Buffalo, N. Y. (Filed December 15, 1913. Published February 17, 1914. Claims use since December 5, 1913. Which is a portrait of the applicant.)—Hair tonic.

74,626.—Bayway Chem. Co., Elizabeth, N. J. (Filed December 16, 1913. Published February 17, 1914. Claims use since June 24, 1913. Being printed in red.)—A disinfectant.

74,657.—Leroy Oldham, Baltimore, Md. (Filed December 17, 1913. Published February 17, 1914. Claims use since October 11, 1913.)—A preparation for the treatment of the hair and scalp.

74,767.—E. Wertheimer & Cie, Paris, France. (Filed December 20, 1913. Published February 17, 1914. Claims use since August, 1913.)—All kinds of perfumes, face paints and rouges.

74,913.—Richard Hudnut, New York, N. Y. (Filed December 31, 1913. Published February 24, 1914. Claims use since February, 1913.)—Dry sachet perfumes.

75,017.—Waldheimer Parfumerie und Toiletenseifen Fabrik, A. H. A. Bergmann, Waldheim, Germany, and New York, N. Y. (Filed January 7, 1914. Published February 24, 1914. Claims use since May 1, 1875.)—Tooth pastes.

75,046.—Lottie C. Blum, Cleveland, Ohio. Filed January 9, 1914. Published March 3, 1914. Claims use since January 1, 1913.)—A shampoo tonic.

75,112.—Closset & Devers, Portland, Oregon. (Filed January 12, 1914. Published March 3, 1914. Claims use since January, 1913, on flavoring extracts for foods.)—Flavoring extracts for foods, etc.

75,114.—F. C. Franck & Co., Chicago, Ill. (Filed January 12, 1914. Published March 3, 1914. Claims use since September 1, 1911.)—Hair elixir.

75,257.—The Hismo Disinfectant Co., Boston, Mass. (Filed January 17, 1914. Published March 3, 1914. Claims use since about December 1, 1913. Consisting of the word "Hismo.")—Deodorizers and disinfectants.

75,497.—William Henry Leak, Watertown, N. Y. (Filed January 28, 1914. Published March 3, 1914. Claims use since May, 1913. The word "Politor.")—A medicated prophylactic dentifrice.

75,540.—J. Hungerford Smith Co., Rochester, N. Y. (Filed January 29, 1914. Published March 10, 1914. Claims use since Oct. 24, 1913.)—Flavoring syrup for non-alcoholic beverages and for non-alcoholic beverages formed by diluting such syrup.

75,541.—J. Hungerford Smith Co., Rochester, N. Y. (Filed January 29, 1914. Published March 10, 1914. Claims use since October 24, 1913.)—Flavoring syrup for non-alcoholic beverages and for non-alcoholic beverages formed by diluting such syrup.

75,643.—The Arthur Chem. Co., New Haven, Conn. (Filed February 3, 1914. Published March 3, 1914. Claims use since October 13, 1913.)—Hair tonic.

NEW TRADE NAME.

We are requested by Richard Hudnut, New York, to announce that he has adopted the trade name "Nyra" for a perfume which he has put upon the market.

RECENT TREASURY DECISIONS.

Appraiser's Decisions on Thymol.

No. 34,768.—THYMOL.—Protests of Fritzsch Bros, et al. Opinion by Brown, G. A. Thymol, classified as a chemical compound under paragraph 3, tariff act of 1909, was claimed entitled to free entry as a crude drug (par. 559), or dutiable under paragraph 20. Protests overruled.

No. 34,816.—THYMOL.—CHEMICAL SALT.—Protest of National Aniline & Chemical Co. Opinion by Brown, G. A. Thymol classified as a chemical mixture or salt containing alcohol was found not to contain alcohol and held dutiable accordingly under paragraph 3, tariff act of 1909.

Caustic Potash Protests Sustained.

The Board of General Appraisers has sustained the protests of F. B. Vandegrift & Co., Philadelphia, Pa., relating to the assessment of duty on an importation of caustic potash. The evidence in the case shows the importation to be commercial caustic potash within the percentages fixed in T. D. 33509, following which decision it is held to be entitled to free entry under paragraph 655, tariff act of 1909, as claimed. The classification by the collector as a chemical compound dutiable under paragraph 3 is reversed and the protest sustained.

Olive Oil in Tins Dutiable at 40 Cents.

The Board of United States General Appraisers has decided that olive oil imported in 5-gallon tin containers shall be assessed at 40 cents per gallon, regardless of the fact that the return of the contents by weight determined under rules promulgated by the Secretary of the Treasury shows the contents of the tins to be less than five gallons of oil, such contents thus determined being shown to range from 4.85 to 4.97 gallons. Duty had been assessed at the rate of 50 cents per gallon under paragraph 38 of the 1909 tariff.

Oil of Almonds Protest Sustained.

The claim of Swayne, Hoyt & Co., San Francisco, Cal., that certain oil of almond is entitled to free entry under paragraphs 639 and 536, tariff act of 1909, was sustained by the Board of United States General Appraisers. The oil was returned by the collector as "expressed oil" and assessed at 25 per cent. ad valorem under paragraph 3. The claim was sustained and the decision of the collector reversed.

Drawback Allowed on Soap.

Treasury Decision 34172 allows a drawback on a toilet preparation designated as Reuter's soap, manufactured by Barclay & Co., of New York, with the use of domestic tax-paid alcohol and various imported materials in combination with domestic materials.

Reappraisal Filed on Soap.

24419—Soap.—From Gleificia Nazionali, Genoa. McClelland, G. A.—White olive oil soap, entered at 0.84 advanced to 0.985 lire per kilo.

FOREIGN CORRESPONDENCE AND MARKET REPORT

AUSTRALIA.

TRADE.—Imports from foreign countries received at Victoria, Australia, in 1912 included the following: Perfumery, \$143,128; soap, \$240,449; spices, \$183,783; waxes, \$220,073. In the same period the exports of soap amounted to \$129,532. Of the above imports the United States contributed the following: Perfumery, \$24,225; soap, \$83,120; waxes, \$67,420. Consul W. C. Magelssen, at Melbourne, says American trade with the district is enjoying a healthy growth. Samples and salesmen are advised.

BULGARIA.

ROSE.—Consul General Chas. Campbell, Jr., at Bucharest, Roumania, in discussing Bulgaria, writes: The principal article exported from Bulgaria to the United States is essence of rose. The district known as the Valley of the Roses, the famous rose valley of Tondja, is the source of the world's supply of this essence, used in the manufacture of articles of perfumery. During the months January to June, 1912, the exports of essence of rose were valued at \$898,637. The total product during 1910 was \$1,098,594, of which \$144,475 worth was exported to the United States. American importers of this product should be on their guard against adulteration of the rose essence by the addition of oil of geranium, the market price of which is about \$2.50 per pound, while the average selling price of the 1910 crop of the rose essence was \$130 per pound. The local authorities guard as carefully as possible against this adulteration, but it is currently reported in Sofia that a part of the production shipped abroad as essence of rose has had the cheaper oil of geranium added to it.

CHINA.

ESSENTIAL OILS.—Consul General George E. Anderson, Hongkong, China, says: Exports of various essential oils of South China and Indo-China production to the United States and Europe are developing into a trade of considerable volume and value. The chief oils of this sort are aniseed and cassia oil, but there are other varieties of oil which have value and are being exported. Various oils are produced for Chinese use which are usually too expensive for foreign markets at present prices, but which are likely to have value in exports in the near future.

The production and export of cassia oil has increased materially during the last year. Exports to the United States, however, decreased in value from \$76,682 in 1912 to \$67,696 in 1913, but shipments to Europe increased by about 50 per cent. There was an increase in exports of star aniseed oil, the value of shipments to the United States having increased from \$92,138 to \$93,199. According to the returns of the Hongkong Chamber of Commerce, shipments of essential oil generally to Great Britain increased from 437 cases in 1912 to 777 cases in 1913, while shipments of these oils to the continent of Europe increased from 4,304 cases in 1912 to 6,567 cases in 1913.

During the last year there were great fluctuations in the price of both of these oils as a result of speculation. The price of the highest grade of cassia oil ranged from \$101 gold per picul of 133 1-3 pounds in January, 1913, to as high as \$104 gold in April, and closed the year at \$86.25 gold per picul at current exchange. Cassia oil comes in three grades, the lowest ranging from 70 degs. to 75 degs. test, the next at from 75 degs. to 80 degs., and the best at 80 degs. to 85 degs. test. The price of aniseed oil followed a line similar to that of cassia oil, ranging from \$197 gold per picul in January, to \$200 gold in May, and closing the year at \$164.15 gold, its lowest price for the season. Aniseed oil comes in one grade only. The chief center of production of each oil for the Hongkong market is in the Province of Kwangsi.

Among other oils produced in Hongkong territory for export or for sale to the Chinese is peppermint oil. The

Chinese product is almost colorless, with pleasant peppermint odor, and resembles in composition mentholized peppermint oil imported in Europe and the United States, largely from Japan. It is reported as having some qualities superior to the Japanese product, but usually runs somewhat higher in price in the redistilled form. This oil, as made by the Chinese, is quoted in local markets at present as worth from 47 cents to \$1.08 gold per pound. Peppermint crystals also are exported in considerable quantities, present quotations being about \$7.75 gold per pound.

Another essential oil of importance to the Chinese found in this market is known as "ngai yau" and is the product of *Artemisia vulgaris*. It is a dark-brown oil with sweet odor, lightly penetrating, and camphoraceous. It is used mostly as a medicine and liniment, being used internally as small drops in tea for colds and similar ailments, and externally for rheumatism and similar troubles. This oil is sold among the Chinese in small bottles much as a patent medicine, and is advertised in much the same way. Its present wholesale price is \$1.45 gold per pound.

SOAP WORKS FOR SHANGHAI.—Announcement has been made at Shanghai of a combination of leading British soap manufacturers, including Lever Bros., and the Brunner Mond, Crossfield, Gossage and Erasmic companies to establish a soap works in Shanghai. It is understood that the scheme involves a large combination of British capital placed by press reports at \$170,327,500. The combine is understood to be preparing to erect a factory in the Yangtzepoo district of Shanghai, a site having already been purchased at a cost of about \$500,000.

The soap imports into China in 1912 amounted to over \$1,500,000, an increase of about 200 per cent. over the imports of 1900. Great Britain is credited with about \$855,000 of the imports in 1912. The United States supplied about \$11,700 worth directly, this trade being principally in toilet soap.

ENGLAND.

SOAP WORKERS' WAGES.—The employees of Joseph Crossfield & Sons, Ltd., soap manufacturers, Warrington, have been notified that the firm has decided to adopt a scheme under which a graduated increase of wages will be given to employees who have been in its service at least two years. The object in making the change, it was stated, was to encourage continuity of service among the employees. The extent of the increase in each case will be determined by the length of service of the worker.

LEVER BROS., LTD.—The report for 1913 states that the advertising expenditure has been fully maintained. There was a balance of £988,238 to the credit of profit and loss, which was distributed in various ways, including dividends, etc., and prosperity sharing with employees.

LONDON.—Lassalles, Ltd., has been registered as a private company with a capital of £2,000 in £1 shares to acquire the business at 9 Blenheim street, W., under the style of "Dr. Lassalles," manufacturers, manufacturers' agents and dealers in toilet specialties, soap, tooth pastes or powders, liquid or powder, hair, skin and mouth washes, medicines, patent foods, medicated food, oils, perfumes, emulsions, etc. First directors: F. Lassalles and J. H. Sayers.

FRANCE.

GRASSE.—Mr. Henri Gautier, director of the Beyrouth (Turquie d'Asie) branch of Lautier Fils, Grasse, was married February 14 to Mlle. Germaine Barreaux.

The committee in charge of the erection of a monument to the late Leon Chiris, of Grasse, held a meeting recently at the office of the Mayor, who is chairman of the committee. The unveiling of the monument will take place on March 29, 1914, and among those who are expected to

(Continued on page 30.)

PRICES IN THE NEW YORK MARKET

(It should be borne in mind by purchasers that the market quotations in this journal are quantity prices.
For small orders the prices will be slightly higher.)

Almond, Bitter.....per lb.	\$4.00	Lemon	2.75	BEANS.	
" F. F. P. A.....	4.50	Lemongrass	1.40	Tonka Beans, Angostura....	2.00
" Artificial .....	.55	Limes, expressed	3.50	" Para	
" Sweet True .....	.65	" distilled .....	.85	Vanilla Beans, Mexican.....	4.50-5.00
" Peach-Kernel	25-.30	Linaloe	3.30	" " Cut..	3.25-3.50
Amber, Crude .....	.15	Mace, distilled .....	.75	" " Bourbon	3.50-4.25
" Rectified .....	.30	Mustard Seed, gen.....	8.50	" " Tahiti	2.20
Anise	1.70	" artificial	1.50		
" Lead free	1.90	Mirbane, rect.....	.12	SUNDRIES.	
Bay, Porto Rico.....	2.90	Neroli, petale	40.00-50.00	Ambergris, black	(oz.) 15.00-20.00
Bay	2.75	" artificial	12.00-17.00	" gray	" 25.00-27.50
Bergamot, 35%-36%	6.25	Nutmeg .....	.80	Civet, horns	" 2.00-2.30
Birch (Sweet)	1.75	Opoponax	7.00	Chalk, precipitated.....	.04½-.06
Bois de Rose, Femelle.....	4.50	Orange, bitter	3.20	Cologne Spirit	(gal.) 2.65-3.10
Cade .....	.20	" sweet	3.00	Cumarin	3.25
Cajeput .....	.60	Origanum	40-60	Heliotropine	1.60
Camphor .....	.14	Orris Root, concrete....(oz.)	4.00-5.00	Menthol	3.50
Caraway Seed	1.40	" " absolute....(oz.)	28.50-32.00	Musk, Cab., pods.....(oz.)	10.00
Cardamom	28.00	Patchouly	4.00-4.75	" grain	15.00
Carvol	2.00	Pennyroyal	1.10	" Tonquin, pods... "	13.75-15.00
Cassia, 75-80%, Technical...	.90	Peppermint	4.00-4.40	" " grains... "	24.00
" Lead free	1.00	Petit Grain, South American.	3.85	" Artificial, per lb.....	1.50-3.00
" Redistilled	1.40	" French	8.00	Orris Root, Florentine, whole	.19
Cedar, Leaf .....	.55	Pimento	1.75	Orris Root, powdered and	
" Wood .....	.16	Rose	(oz.) 12.00-16.00	granulated .....	.22
Cinnamon, Ceylon.....	6.50-14.00	Rosemary, French .....	.80	Talc, Italian	(ton) 32.00-35.00
Citronella, Ceylon .....	.48	" Spanish .....	.50	" French	" 25.00-30.00
Citronella, Java	1.35	Rue	3.00	" Domestic	" 15.00-25.00
Cloves	1.10	Safrol .....	.40	Terpineol .....	.30
Copaiba	1.05	Sandalwood, East India.....	5.25-5.50	Vanillin	(oz.) .30-.33
Coriander	6.00-9.00	" West India.....	1.60		
Croton	1.10	Sassafras, artificial .....	.28	SOAP MATERIALS.	
Cubebs	3.10	" natural .....	.65	Cocoonut oil, Cochin, 12@13c.; Cey-	
Erigeron	2.00	Savin	1.60	lon, 10½c.	
Eucalyptus, Australian, 70%.	.50	Spearmint	4.00	Cottonseed oil, crude, tanks, 44½@	
Fennel, Sweet	2.00	Spruce .....	.50	45c. gal.; refined, 7@8c. lb.	
Geranium, African	6.00	Tansy	4.50	Grease, brown, 4¼@5¼c.; yellow,	
" Bourbon	5.75	Thyme, red	1.10	5¼@6¼c.; white, 6¼@7¼c.	
" Turkish	3.50	" white	1.30	Olive oil, denatured, 85@87c.	
Ginger	6.50	Vetivert, Bourbon	10.00	" " foots, prime, 7¼@8c.	
Gingergrass	1.75-2.00	" Indian	30.00-40.00	Palm oil, Lagos, 7¾@8c.; red, prime,	
Hemlock .....	.55	Wintergreen, artificial .....	.30-.32	6¼@7c.	
Juniper Berries, twice rect...	1.00	" genuine	4.25-4.50	Peanut, 6½@7½c.	
Kananga, Java	3.75	Wormwood	4.75	Rosin, water white, \$7.25@7.50.	
Lavender, English	12.00	Ylang-Ylang	30.00-40.00	Soya Bean oil, 6¼c.	
" Cultivated	8.00			Tallow, city, 6¼c. (hhd.).	
" Fleurs	3.50-3.75			Chemicals, borax, 3¾@4¼c.; caustic	
" (Spike)	1.10-1.25			soda, 60 p. c., \$1.60.	

THE DOMESTIC MARKET.

The market in essential oils has been about the same, except in peppermint oil. It is, of course, too early to say anything about the new crop; but the old oil is being well held, and all purchases of any size immediately produce an upward tendency.

All Messina oils have eased off, due to the large crops and the prospects for another good crop next winter.

Beans.

The local market in beans is firm, and the probability is that prices will go higher. There is a scarcity in goods among local jobbers, although stocks abroad are considerable and are firmly held. It is probable that the export tax of \$2 Mexican per kilo will be permanent, though efforts to have this tax removed have held up shipments. The weather has been bad and this has interfered with the curing.

The Bourbon new crop reports are not yet out; but the old crop is practically now all in France, and in firm hands. Several severe storms last summer are responsible for the shortage in the yield. The European consumption has practically doubled due largely to the increased demand from French manufacturers, who are no longer permitted to use vanillin.

An Ethereal Oil from Spruce Wood.

Peter Vilason and B. Segerfelt. *Arkiv. Kemi. Min. Geol.*, 4, No. 20, 3 pp. A red-brown oil is passed off with the waste in the sulfite method of making cellulose. The greater portion of this came off by steam distillation in the form of a white substance, m. 207 degs., sublimed at 190 degs. Boiling point is so near that of the melting point that its determination was unsuccessful. Optically inactive (this was not considered by the authors as significant, cf. Armstrong and Tilden, *Ber.*, 12, 1755). Analysis corresponds to $C_{10}H_{17}OH$ (a terpene alcohol).

ANALYTICAL TESTS AND METHODS FOR ESSENTIAL OILS.*

Essential oils are extremely liable to adulteration, the high price of many of the finer ones lending to this tendency. The usual adulterations are with alcohol, chloroform, oil of turpentine, fixed oils, both vegetable and mineral, and spermaceti, and by mixing the cheaper essential oils with the more expensive. The exact determination of physical constants, such as specific gravity and optical rotation becomes, therefore, very important as well as the recognition of characteristic chemical constituents.

The detection of fatty oils, resins, or spermaceti can often be effected by simply placing a drop of a suspected oil upon a piece of white paper and exposing it for a short time to heat. If the oil is pure it will entirely evaporate, but if one of these adulterants be present, a greasy or translucent stain will be left on the paper. These substances will also remain undissolved when the oil is agitated with thrice its volume of rectified spirit.

Alcohol in essential oils may be detected by agitating the oil with small pieces of dry calcium chloride. These remain unaltered in a pure essential oil, but dissolve in one containing alcohol, and the resulting solution separates, forming a distinct stratum at the bottom of the vessel. When only a very little alcohol is present, the pieces merely change their form and exhibit the action of the solvent on their angles of edges, which becomes more or less obtuse or rounded. If the experiment be performed in a graduated tube and a known measure of the oil employed, the diminution in its volume will give that of the alcohol mixed with it. Dragendorff recommends the use of metallic sodium, which does not act on hydrocarbons, and but slightly in the cold on oxygenated essential oils if pure and dry, but in the presence of ten or even five per cent. of alcohol a small piece of sodium is dissolved, while a brisk evolution of gas takes place. Aniline-red (magenta) is insoluble in essential oils if pure and dry, but in the presence of a small proportion of alcohol they acquire a pink or red color. This adulteration with alcohol is said to be very common, as it is a frequent practice of druggists to add a little of the strongest rectified spirit to their essential oils to render them transparent, especially in cold weather. Oil of cassia is a notable example of an oil treated in this way.

The adulteration of essential oils with fixed oils is best distinguished by what is termed "steam distillation." The essential oils all distil over with steam at 180 C., while resinous matters and fixed oils, added as adulterants, will remain in the retort. The adulteration of the finer essential oils with cheaper essential oils is constantly met with. Thus, the expensive oil of cassia is adulterated with oil of cedarwood; oil of rose with oil of geranium; and oil of geranium with oil of turpentine. Noting the specific gravity carefully where that is characteristic, and noting the odor on evaporating, are methods most generally resorted to for the detection of these fraudulent admixtures.

In the case of such oils as contain esters, such as oils of peppermint and rosemary, the percentage of menthyl acetate, bornyl acetate, etc., can be ascertained by a saponification with half normal potassium hydroxide solution. The free alcohol also present in these oils is then determined by an acetylation with acetic anhydride and anhydrous sodium acetate, followed by a saponification test made upon the washed and dried acetylated oil. Exact

directions for carrying out these determinations with official essential oils are given in the U. S. Pharmacopeia.

The phenolic constituents of certain essential oils like the eugenol of oils of cloves and pimenta and the thymol of oil of thyme can also be determined by the use of aqueous solutions of sodium or potassium hydroxide and reading off the loss in the oily layer which ensues on shaking.

FOREIGN CORRESPONDENCE.

(Continued from page 28.)

be present are Mons. Loubet and Failleres, former presidents of France, and many senators and deputies. An elaborate program has been arranged, and the day will be practically a holiday for the region.

ITALY.

OLIVE CROP.—Consul Benjamin F. Chase, of Leghorn, reports under date of February 2 that the unusual cold weather and fall of snow during late December and early January generally and seriously affected the olive crop of Tuscany, which is now estimated to fall more than 40 per cent. below a full crop.

ESSENCES.—Consul A. W. Weddell, at Catania, says: Prior to 1898 the production of citrus fruits by-products, such as essence of orange, lemon, bergamot, etc., was practically nil, the fruit, in great part, being sent to Great Britain, where the various manufacturing processes were carried out. All this is now radically changed. In 1912 the amount of essences exported through the port of Catania amounted to 199,640 pounds.

PANAMA.

SOAP.—Consul General Alban G. Snyder reports that a soap and candle factory at Panama City started operations on February 1. It has modern steam machinery, with a weekly productive capacity of 5,000 to 6,000 cases of soap, or an average of 20,000 boxes monthly and of 32,000 to 40,000 candles daily.

PORTUGAL.

OLIVE CROP.—A British consul sends the following: Reports were prevalent at the end of the summer of 1913 that the great heat had dried up the olives, and that the crop would be very bad. Inquiries made of one of the large oil merchants in Lisbon made it clear that these evil prophecies have proved quite true. It would appear that the actual yield of olives was very small, that such olives as were picked were very poor in oil, and that the oil they produced was of a very bad quality.

SPAIN.

OLIVE OIL.—Consul Charles S. Winans, Seville, says: From December 1, 1913, when the new oil from the 1913-14 crop was placed on the market, to January 24, 1914, 403,000 gallons of olive oil have been exported from Seville in comparison with 29,500 gallons during the corresponding period of 1912-13. Many oil merchants from other countries are here purchasing or making contracts for future deliveries, hence prices are abnormally high.

SWITZERLAND.

BARBERS' SUPPLIES.—Most of the Zurich barber shops are neat and attractive in appearance. Perfumery, soap, and other toilet articles are invariably carried for sale, and some barbers even sell leather goods, canes, and travelers' articles. Razors, scissors, clippers, combs, brushes, soaps, and other articles used are generally of domestic make, although German and French goods are also popular.

*From Industrial Organic Chemistry, by Sadtler.

with
cia.
like
mol
of
and
on

resi-
An
will

orn,
cold
arly
o of
per

ays :
acts,
rac-
reat
were
912
of

at a
ons
h a
oap,
to

Re-
that
rop
oil
cies
tual
were
oro-

ays :
13-
914,
ille
ling
un-
ure

ops
ap,
ale,
av-
es,
stic
also